

Nevada Bureau of Mines and Geology

Special Publication MI-2007

The Nevada Mineral Industry 2007

Metals
Industrial Minerals
Oil and Gas
Geothermal

Exploration
Development
Mining
Processing

This report, the twenty-ninth of an annual series, describes mineral, oil and gas, and geothermal activities and accomplishments in Nevada in 2007: production statistics, exploration and development including drilling activity, discoveries of orebodies, new mines opened, and expansion of existing mines. Statistics of known gold, silver, and other metallic deposits, and directories of mines and mills are included.



Mackay School of Earth Sciences and Engineering
College of Science
University of Nevada, Reno

2008

Nevada System of Higher Education 2008

Board of Regents

Michael Wixom, *Chair*

Mark Alden

Stavros Anthony

Cedric Crear

Thalia M. Dondero

Dorothy Sewell Gallagher

Jason Geddes

Ron Knecht

James D. Leavitt

Howard Rosenberg

Jack L. Schofield

Steve Sisolak

Bret Whipple

James E. Rogers, *Chancellor*

University of Nevada, Reno

Milton D. Glick, *President*

College of Science

Jeffrey Thompson, *Dean*

Mackay School of Earth Sciences and Engineering

James V. Taranik, *Director*

Nevada Bureau of Mines and Geology

Jonathan G. Price, *State Geologist and Director*

Scientific Research Staff

Economic Geology, Geologic Mapping, and Geologic Framework

Harold F. Bonham, Jr., *Research Geologist (Emeritus)*

Stephen B. Castor, *Research Geologist*

John W. Erwin, *Geophysicist (Emeritus)*

James E. Faulds, *Research Geologist*

Nicholas Hinz, *Research Geologist*

Larry J. Garside, *Research Geologist*

Christopher D. Henry, *Research Geologist*

Liang-Chi Hsu, *Research Mineralogist (Emeritus)*

John L. Muntean, *Research Economic Geologist*

Joseph V. Tingley, *Research Geologist (Emeritus)*

Economic Geologic Hazards, Engineering Geology, and Geophysics

John W. Bell, *Research Engineering Geologist*

Geoffrey Blewitt, *Research Professor*

Bret Pecoraro, *Laboratory Assistant*

Craig M. dePolo, *Research Geologist*

William C. Hammond, *Research Scientist*

P. Kyle House, *Research Geologist*

Heather Green, *Research Associate*

Corné W. Kreemer, *Research Scientist*

Hans-Peter Plag, *Research Scientist*

Alan R. Ramelli, *Research Geologist*

Environmental Geology and Hydrogeology

Paul J. Lechler, *Chief Chemist/Geochemist*

Lisa Shevenell, *Research Hydrogeologist*

Science Education

Daphne D. LaPointe, *Research Geologist*

Research and Administrative Support Staff

Cartography, Publication Support

Jordan Hastings, *Chief Cartographer and GIS Manager*

Heather Armeno, *Cartographer*

Linda Goar, *Accounting Assistant*

Jack Hursh, Jr., *Cartographer*

Gary Johnson, *Information Systems Specialist*

Jennifer Mauldin, *Cartographer*

Kris R. Pizarro, *Cartographic Supervisor*

Susan Tingley, *Senior Cartographer (Emeritus)*

Analytical Laboratory

Mario Desilets, *Chemist/Quality Assurance Officer*

Information and Publication Sales

Ron Hess, *Chief Information Officer*

David Cornett, *Supply Assistant*

David Davis, *Geologic Information Specialist*

Martha Henson, *Administrative Assistant*

Charlotte Stock, *Sales Manager*

Manuscript reviewed by:

John DeYoung, Jr., Arnie Tanner, and other members
of the *USGS Minerals Information Team*

Alan Coyner, *Nevada Division of Minerals*

Editor: Daphne D. LaPointe

Graphics: Jack Hursh, Jon Price, and John Muntean

Web Edition, November 2008

**Nevada Bureau of Mines and Geology
Special Publication MI-2007**

**The Nevada Mineral Industry
2007**

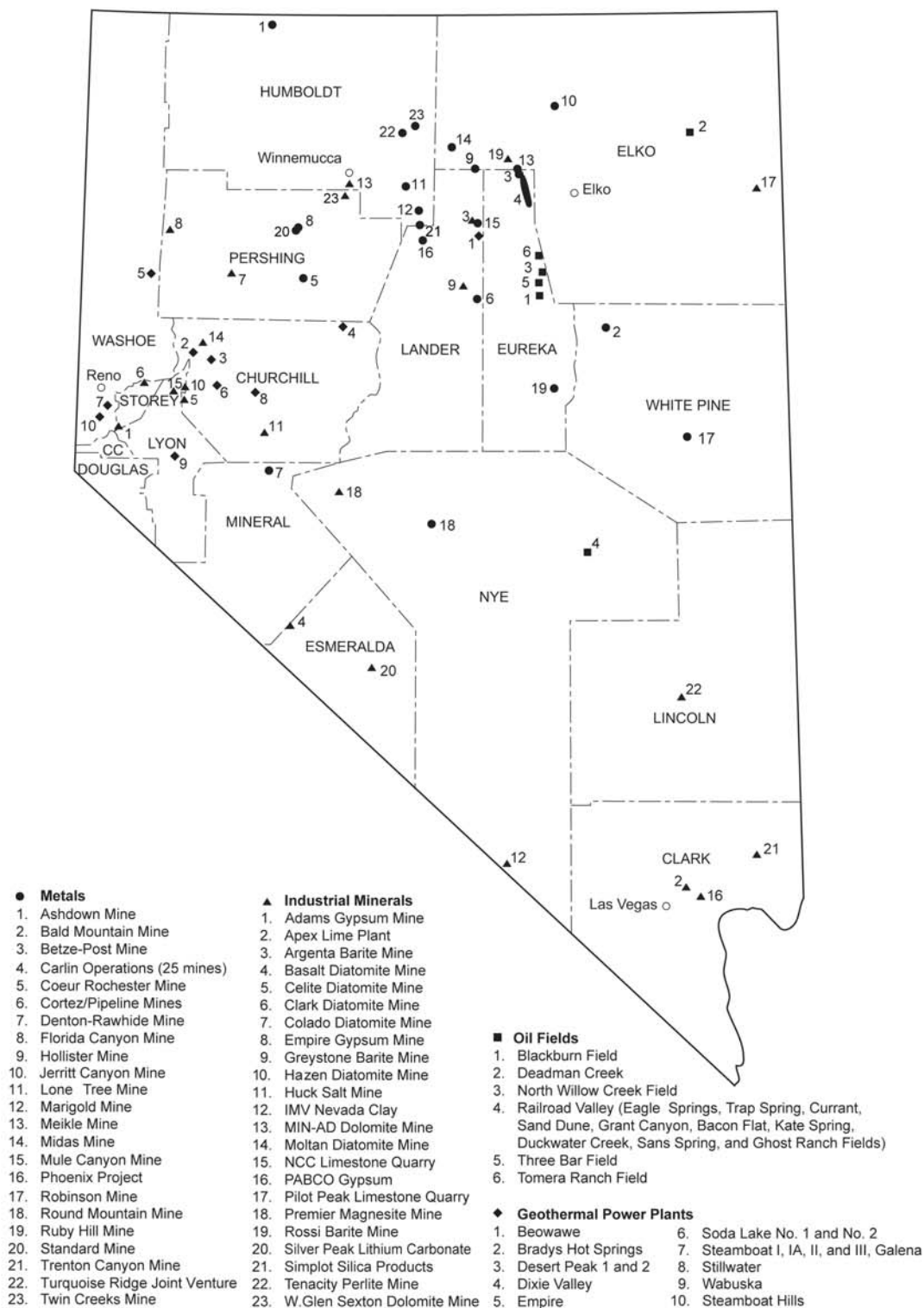
Contents

- 3 Overview**
by Jonathan G. Price
- 27 Metals**
by John L. Muntean
- 88 Major Precious-Metal Deposits**
by John L. Muntean
- 117 Other Metallic Deposits**
by John L. Muntean
- 119 Industrial Minerals**
by David A. Davis
- 142 Geothermal Energy**
by Ronald H. Hess
- 155 Oil and Gas**
by David A. Davis
- 170 Directory of Mining and Milling Operations**
by David A. Davis



Mackay School of Earth Sciences and Engineering
College of Science
University of Nevada, Reno

2008



Major mines, oil fields, and geothermal plants, 2007.

Overview

by Jonathan G. Price

This report highlights activities through 2007 in metals, industrial minerals, geothermal energy, and petroleum. Numerous graphs and charts are incorporated for rapid inspection of trends in production and price. The value of overall mineral and energy production in Nevada reached an all-time high of \$5.49 billion in 2007, primarily as a result of the increase in the prices of gold and nearly all other commodities. Gold production has more or less steadily decreased from a high of 8.86 million ounces in 1998 to 6.0 million ounces in 2007, but 2007 was nonetheless the nineteenth consecutive year with production in excess of 5.0 million ounces. Nevada led the nation in the production of gold and barite, and was the only state that produced magnesite, lithium, and the specialty clays, sepiolite and saponite. Other commodities mined and produced in Nevada in 2007 included copper, construction aggregate (sand, gravel, and crushed stone, including limestone and dolomite), silver, geothermal energy, gypsum, petroleum, lime (produced from limestone and dolomite), cement (produced from limestone, clay, gypsum, and iron ore), silica (industrial sand), clays, molybdenum, perlite, dimension stone, salt, semiprecious gemstones (turquoise and opal), mercury (as a by-product of gold and silver processing), and potassium alum (kalinite).

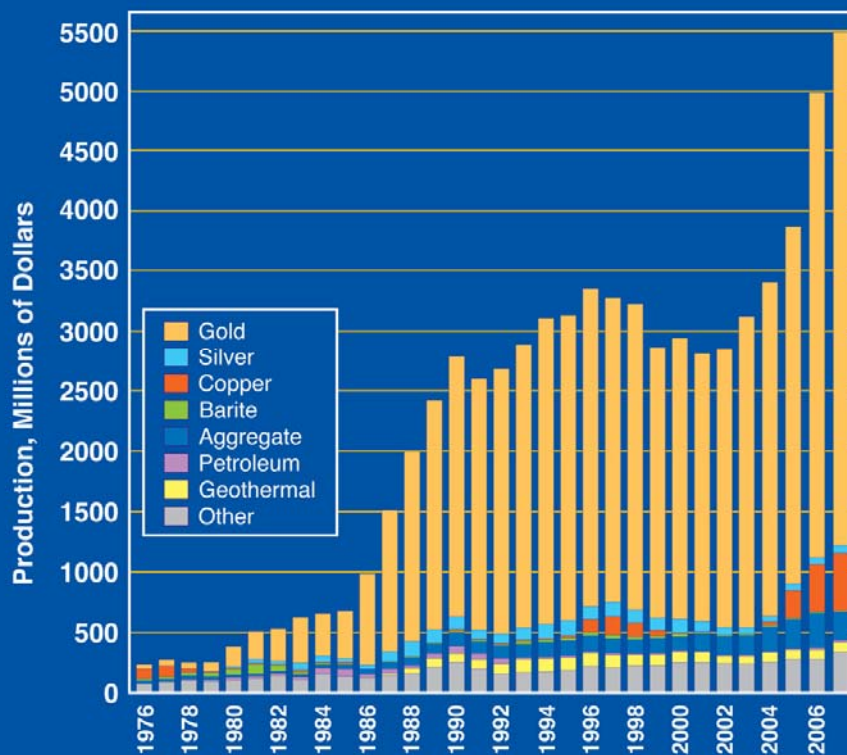
MINERAL, GEOTHERMAL POWER, AND PETROLEUM PRODUCTION IN NEVADA¹

Commodity	2006		2007		% change from 2006 to 2007	
	Quantity	Value (millions)	Quantity	Value (millions)	Quantity	Value
Gold (thousand troy ounces)	6,310	\$3,805.0	6,037	\$4,197.8	-4.3	+10.3
Silver (thousand troy ounces)	8,494	98.0	8,430	112.8	-0.8	+15.1
Copper (thousand pounds)	127,554	389.0	142,794	478.4	+11.9	+23.0
Aggregate (thousand short tons)	48,000	288.0	59,410	295.2	See ¹	
Barite (thousand short tons)	572	20.0	573	20.8	+0.2	+4.0
Gypsum (thousand short tons)	1,598	22.4	1,596	18.0	-15.4	-19.9
Geothermal energy (thousand megawatt-hours)	1,333	74.4	1,243	69.4	-6.8	-6.7
Petroleum (thousand 42-gallon barrels)	426	21.6	408	23.5	-4.2	+8.8
Other minerals ²	-----	261.3	-----	297.8	-----	+5.6
Total	-----	\$4,979.7	-----	\$5,491.9	-----	+10.3

¹Production as measured by mine shipments, sales, or marketable production (including consumption by producers); compiled by the Nevada Division of Minerals and the Nevada Bureau of Mines and Geology. Products milled or processed in Nevada but mined from deposits in California are excluded. Specifically, colemanite from a mill in Amargosa Valley in Nye County and zeolite from the Ash Meadows plant in Nye County are not included in these totals. The percentage changes for aggregate production are not shown because different approaches were used in 2006 and 2007 to estimate production figures.

²Building stone, cement, clay, diatomite, lime, lithium carbonate, magnesite, mercury, molybdenum, perlite, salt, and silica sand.

Nevada Mineral, Petroleum, and Geothermal Production



Nevada ranked second in the United States in terms of value of overall nonfuel (excluding oil, gas, coal, and geothermal) mineral production in 2007 (according to the U.S. Geological Survey, Mineral Commodity Summaries 2008, <http://minerals.usgs.gov/minerals/pubs/mcs/2008/mcs2008.pdf>). Arizona retained first place because of high copper prices. California, with its large population and commensurate demands for construction raw materials, was third. Utah, a major producer of copper and molybdenum, primarily from one mine near Salt Lake City, was fourth. Alaska, the nation's top producer of zinc and silver, was fifth. Florida, the leader in phosphate production, was sixth. Texas, another populous state and major producer of construction raw materials, was seventh, and Minnesota, the leader in iron-ore production, was eighth.

Nevada's production of gold, valued at \$4.2 billion, was 78% of the U.S. total and helped make the U.S. the fourth leading gold producer in the world in 2007. Nevada alone accounted for 8% of world production of gold. Only China, Australia, and South Africa produced more gold than the State of Nevada in 2007. Second to gold in terms of Nevada's mineral value in 2007 was copper (\$478 million), followed by construction

aggregate (\$274 million). Silver, chiefly a by-product or co-product of gold production, ranked as the fourth leading mineral commodity in 2007, with a value of \$113 million. Electrical power from geothermal energy production in Nevada in 2007 was valued at \$69 million.

The contributions that mining makes to the economies of Nevada and the U.S. are significant in terms of jobs, commerce, taxes, improvements to the infrastructure, and lowering of the U.S. trade deficit. Because of Nevada's production, the U.S. is a net exporter of gold, most of which is sold on the international market for bullion, jewelry, and arts, and some of which is sold for its conductive and non-corrosive qualities in computers and other electronics, for its heat-reflecting quality as a coating on windows, and for use in dental work.

The U.S. is a net exporter of few mined commodities and a net importer of many. Exports of gold from Nevada help offset the staggering U.S. trade deficit (difference between imports and exports of goods and services), which amounted to \$700 billion in 2007, down \$53 billion from a record high in 2006 (according to the Department of Commerce, Bureau of Economic Analysis, www.bea.gov). Among the major products mined in Nevada, the U.S. relies upon imports for barite (83% of total U.S. consumption from imports in 2007, according to the U.S. Geological Survey, used primarily to prevent blowouts in oil and gas drilling) and silver (55%, used in photographic and other applications). The U.S. also depends on imports of copper (37%, used primarily to conduct electricity) and gypsum (36%, used in wallboard).

The local economy also benefits from mining. Construction of new homes, casinos, other businesses, schools, and roads requires local sources of sand, gravel, crushed stone, gypsum, and raw materials for cement, all of which are abundant in Nevada. The mining industry directly employed 12,100 people in 2007 (according to the Nevada Department of Employment, Training and Rehabilitation, <http://www.nevadaworkforce.com/>), and the industry is responsible for another 52,000 jobs related to providing the goods and services needed by the industry and its employees (D. Driesner and A.R. Coyner, 2008, Major Mines of Nevada 2007, Mineral Industries in Nevada's Economy, Nevada Bureau of Mines and Geology Special Publication P-19, 28 p.; available at www.nbmng.unr.edu/dox/mm/mm07.pdf).

Nevada and the U.S. make significant contributions to the world's production of several mineral commodities. Thanks in part to Nevada's production, the U.S. is a major producer, as well as consumer, of gypsum (with the U.S. accounting for 13% of world production in 2007) and industrial sand (29% of world production). In addition to gold,

the U.S. is a leading silver producer (6% of world production). The U.S. is essentially self sufficient, as are most countries, in construction aggregate, which usually is mined from sources near where it is used. Total U.S. production of construction sand, gravel, and crushed stone in 2007 (approximately 3.0 billion metric tons, according to the U.S. Geological Survey) decreased by 9% from 2006, because of weaker demand from the residential construction industry. Net imports of aggregate account for less than 1% of consumption. The U.S. is also self sufficient in the other major mined material, coal. According to the U.S. Energy Information Administration (www.eia.doe.gov), the U.S. produced and consumed approximately 1.04 billion metric tons of coal in 2007, slightly less than in 2006, which was a record high year with 1.05 billion metric tons. Although no coal is produced in Nevada, coal is a major source of energy for generation of electricity in Nevada and many other states.

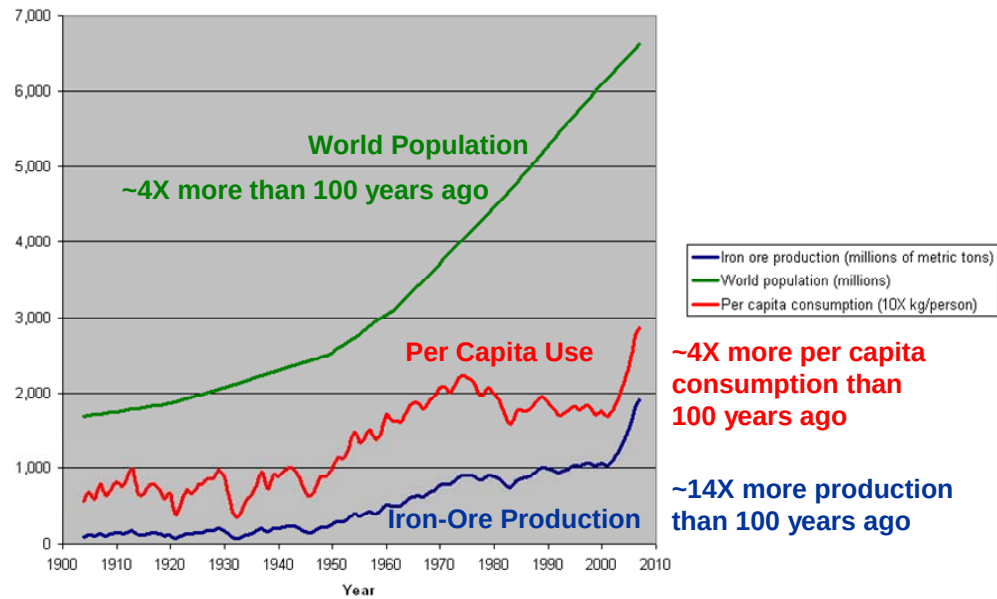
STATISTICS ON SELECTED MINERAL RESOURCES, 2007¹

Commodity	US Import Reliance (% of US consumption)	Leading Producers (% of world mine production in 2007)
Aluminum ore	100	Australia (34%), China (17%), Brazil (13%)
Manganese	100	South Africa (20%), Australia (19%), China (14%), Gabon (13%)
Rare Earths	100	China (97%), India (2%)
Platinum	94	South Africa (80%), Russia (12%), Canada (4%), US (1%)
Barite	83	China (55%), India (13%), Morocco (8%), US (7%)
Potash	81	Canada (33%), Russia (19%), Belarus (16%)
Tin	79	China (43%), Indonesia (28%), Peru (13%), Bolivia (6%)
Tungsten	70	China (86%), Russia (5%), Canada (3%), Austria (1%)
Chromium	62	South Africa (38%), Kazakhstan (18%), India (18%), US (~2%)
Zinc	58	China (27%), Peru (14%), Australia (13%), US (7%)
Silver	55	Peru (17%), Mexico (15%), China (13%), US (6%)
Copper	37	Chile (37%), Peru (8%), US (8%), China (6%), Australia (6%)
Gypsum	36	China (27%), US (13%), Spain (9%), Iran (9%), Canada (6%),
Cement	17	China (50%), India (6%), US (4%), Japan (3%)
Nickel	17	Russia (19%), Canada (16%), Australia (11%), Indonesia (9%)
Phosphate rock	14	China (24%), US (20%), Morocco (19%), Russia (7%)
Iron ore	(imports = exports)	China (32%), Brazil (19%), Australia (17%), India (8%), US (3%)
Gold	(US is exporter)	China (11%), South Africa (11%), Australia (10%), US (10%),
Silica	(US is exporter)	US (29%), Slovenia (8%), Germany (6%), Austria (6%)
Molybdenum	(US is exporter)	US (32%), China (25%), Chile (22%), Peru (9%)
Diatomite	(US is exporter)	US (38%), China (19%), Denmark (11%), Japan (6%)
Beryllium	(US is exporter)	US (77%), China (15%), Mozambique 5%

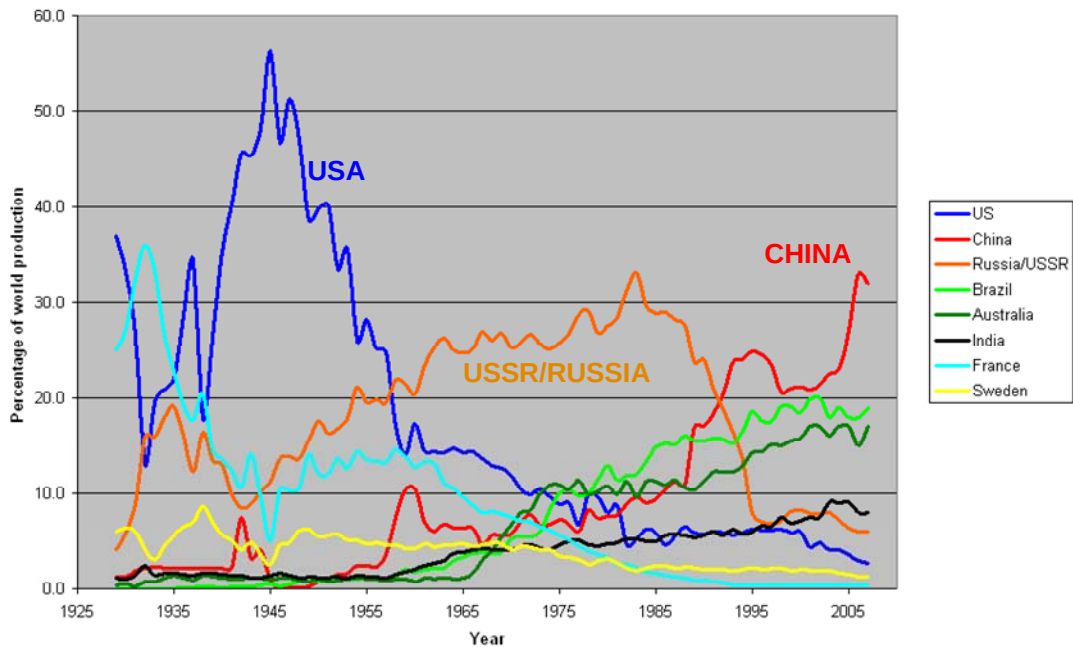
¹ Source: USGS Mineral Commodity Summaries 2008, with revision to gypsum figures from USGS specialists.

Global demand for nearly every mineral (and energy) commodity has increased sharply over the last decade, and trends suggest heavy demand for the foreseeable future. Demand is growing partly because world population is increasing, and partly because standards of living (measured by per capita consumption) are increasing.

Annual global iron-ore production reached an all-time high of 1.9 billion metric tons in 2007. That equals approximately 0.4 km³ of magnetite or hematite ore, or at least 1 km³ of ore plus overburden and waste rock – the equivalent of one huge mine, per year.

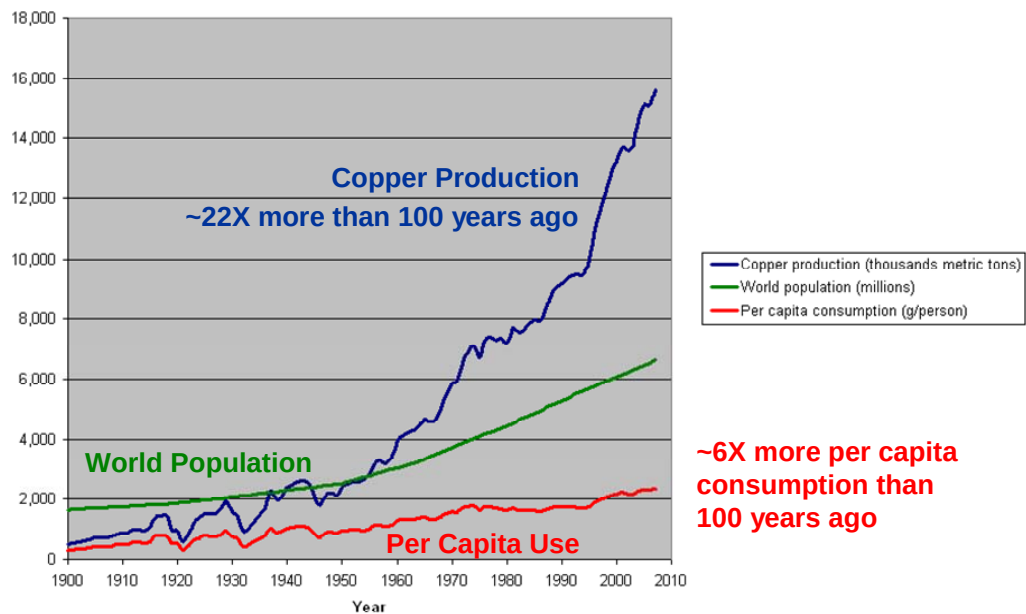


Global iron-ore production, per capita consumption, and population, 1904-2007. Source of data: U.S. Geological Survey.

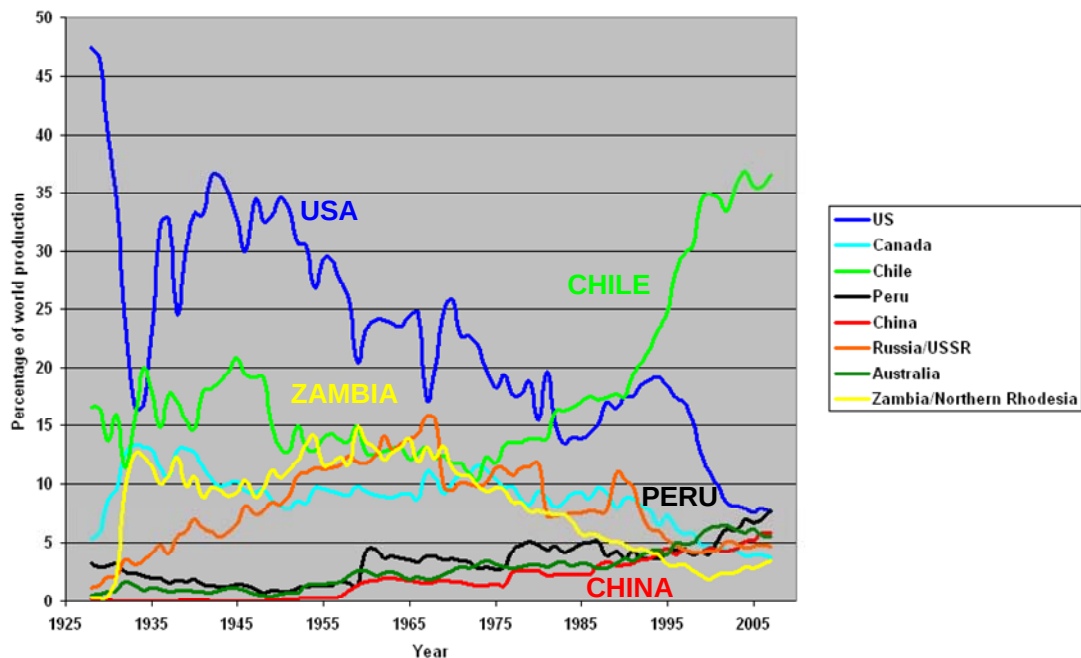


Percentage of annual global iron-ore production by country, 1929-2007. Source of data: U.S. Geological Survey.

Global copper production in 2007 (15.6 million metric tons) nearly equaled over 100 years of production from the Bingham Canyon mine in Utah (16.4 million metric tons).

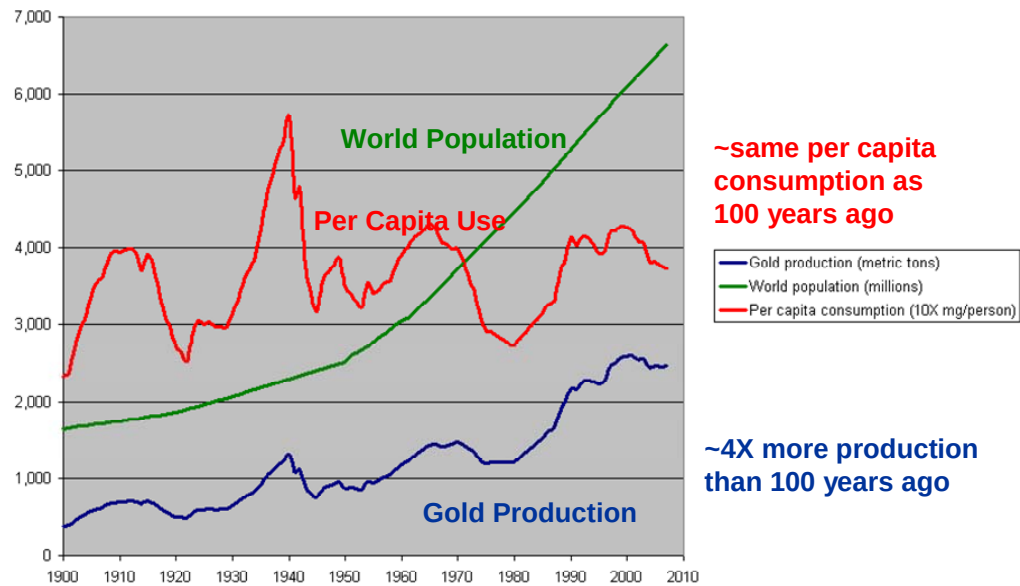


Global copper production, per capita consumption, and population, 1900-2007. Source of data: U.S. Geological Survey.

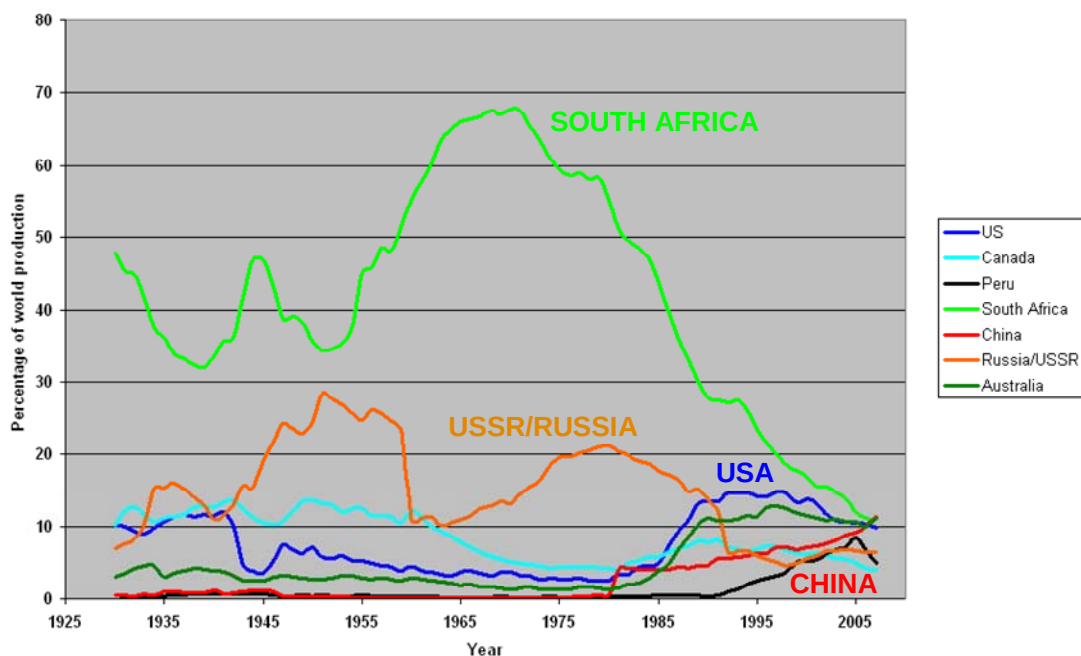


Percentage of annual global copper production by country, 1928-2007. Source of data: U.S. Geological Survey.

Global gold production in 2007 (2,476 metric tons) approximately equaled the cumulative production from the Carlin trend (2,200 tons), one of world's top gold-mining regions.



Global gold production, per capita consumption, and population, 1900-2007. Source of data: U.S. Geological Survey and GFMS.



Percentage of annual global gold production by country, 1930-2007. Source of data: U.S. Geological Survey and GFMS.

2007 Global production of selected mineral commodities (metric tons)* by country, compared to Nevada

Country/State	Area (10 ⁶ km ²)	Gold	Silver	Copper	Gypsum	Barite	Industrial Sand
Algeria	2.38				1,200,000	63,000	
Australia	7.68	275	2,000	870,000	4,200,000		3,700,000
Austria	0.08				1,000,000		6,800,000
Belgium	0.03						1,800,000
Brazil	8.51			134,000	1,750,000	13,000	1,600,000
Canada	9.96	100	1,200	585,000	9,500,000		1,600,000
Chile	0.76		1,400	5,600,000			
China	9.57	280	2,700	920,000	7,650,000	4,400,000	
Egypt	1.00				2,000,000		
France	0.57				4,800,000		6,500,000
Gambia	0.01						1,400,000
Germany	0.36				1,750,000	88,000	7,000,000
India	3.28			35,000	2,500,000	1,000,000	1,600,000
Indonesia	1.90	110		780,000			
Iran	1.65			230,000	12,000,000	240,000	1,900,000
Italy	0.30				5,460,000		3,000,000
Japan	0.38				5,850,000		4,600,000
Kazakhstan	2.72			460,000		95,000	
Mexico	1.97		3,000	345,000	6,080,000	186,000	2,600,000
Morocco	0.45					665,000	
Norway	0.32						1,500,000
Peru	1.29	170	3,400	1,200,000			
Poland	0.31		1,300	520,000	1,580,000		1,500,000
Romania	0.24						1,500,000
Russia	17.07	160		740,000	2,300,000	63,000	
Slovakia	0.05						2,000,000
Slovenia	0.02						10,000,000
South Africa	1.22	250	90	120,000			3,200,000
Spain	0.50			9,000	11,500,000		5,100,000
Thailand	0.51				8,570,000	5,000	
Turkey	0.78			49,000		150,000	1,200,000
United Kingdom	0.24				1,700,000	50,000	5,000,000
Uruguay	0.18				1,150,000		
Zambia	0.75			530,000			
USA	9.37	240	1,220	1,160,000	17,000,000	540,000	35,000,000
Nevada	0.29	188	262	64,800	1,230,000	520,000	559,000
WORLD	149.90	2,476	20,500	15,400,000	135,000,000	7,800,000	120,000,000

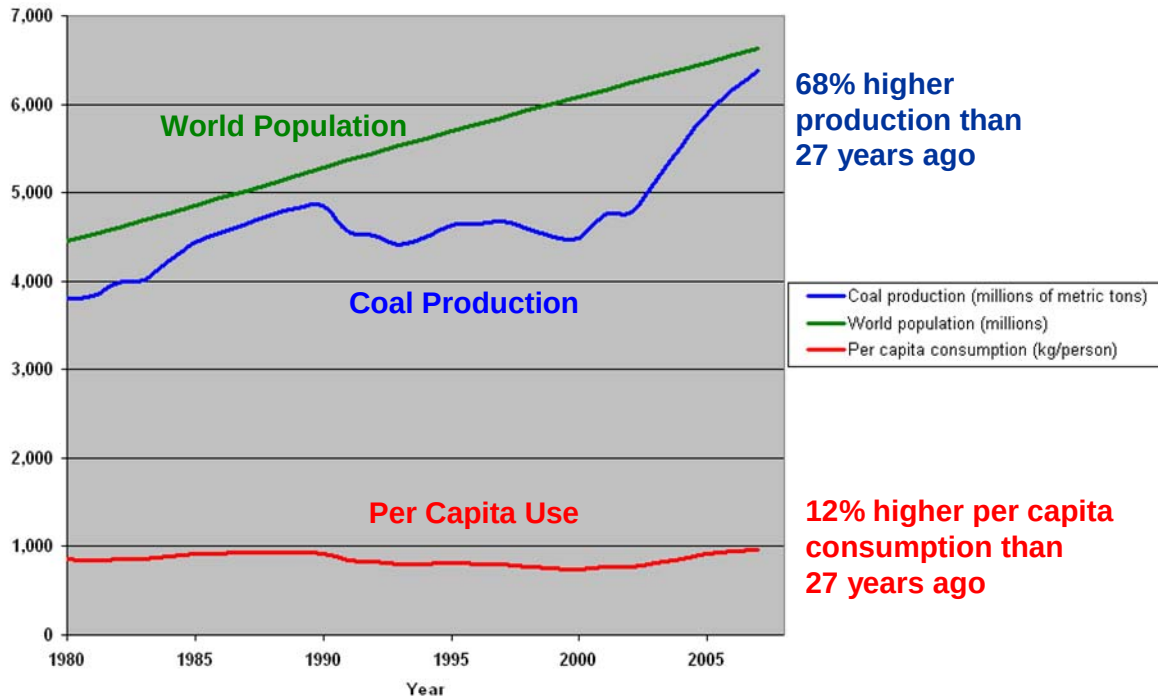
* Production data for all areas except Nevada are from the U.S. Geological Survey (USGS) minerals information publications (<http://minerals.usgs.gov/minerals/>), with revisions from USGS mineral commodity specialists; Gold statistics for China and the world are from GMFS (www.mineweb.co.za). USGS lacks data for some commodities in some countries; production data for Nevada are from Driesner and Coyner (2008), with modifications as noted in this report; USGS statistics are adjusted to be consistent with Nevada data.

Historical iron-ore production reflects significant economic changes. For example, the 20th century history of iron-ore production reflects the decline of France as a superpower, the impact of the Great Depression on the U.S. economy, and the reason Germany wanted to conquer France – in part to supply its military-industrial demands for steel.

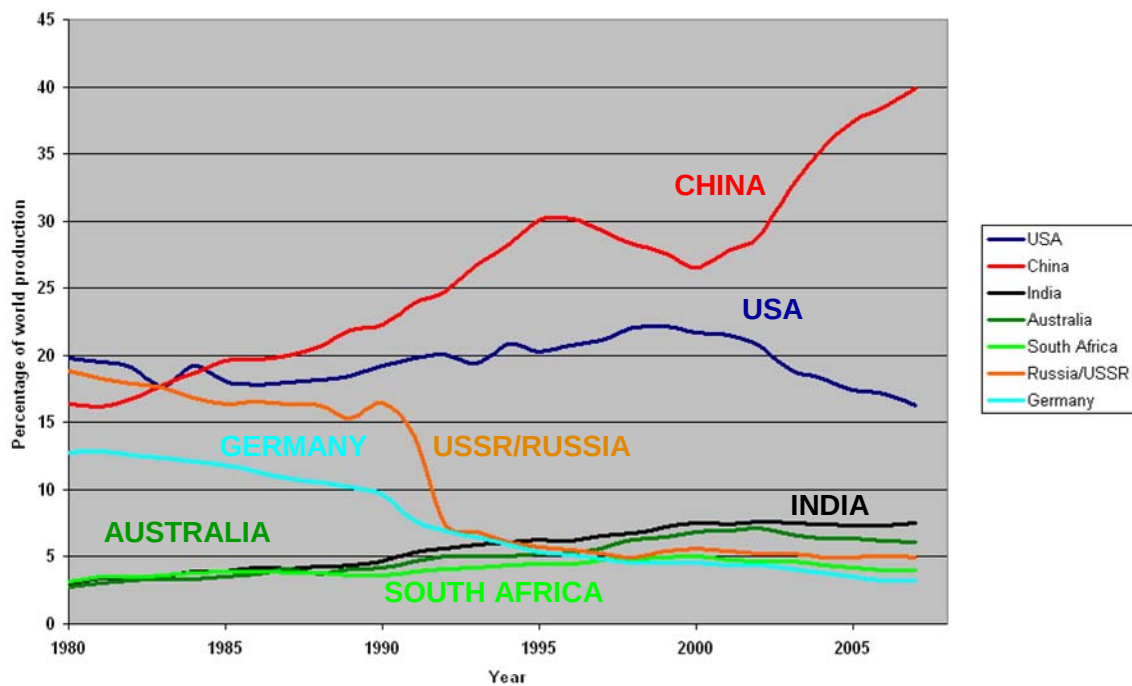
China is undoubtedly the world's dominant economic superpower today, as reflected by its mineral production. Russia and the U.S. have declined. For gold, copper, iron, and coal, China's domestic production reached all-time highs in 2007. India is also emerging as an economic superpower, but not at the scale of China. Of the countries listed as producers of 22 key mineral commodities in 2007, China was a significant producer (with $\geq 10\%$ of world supply) of 16, and the USA was a significant producer of 7. China has also outstripped the U.S. in coal production. According to the U.S. Energy Information Administration, China overtook the U.S. as the world's leading coal-mining country in 1985, and by 2007 China's production was 40% of global production, compared with 16% for the U.S. Global coal production reached its all-time high of 6.38 billion metric tons in 2007.

China actually needs more iron than it can supply domestically. Much of the recent increase in iron-ore production in Australia (2.4 times more in 2007 than in 1980) and Brazil (2.1 times more in 2007 than in 1980) is supplying demand from China. Although U.S. consumption of iron ore approximately equals domestic production, iron ore from the U.S. (Iron Mountain, Utah) will be shipped to China for steel production. The U.S. is a supplier of raw materials to an increasingly industrialized China.

For the first time in 100 years, South Africa is not the leading gold producer; China is number one, as of 2007. South Africa's production peaked at 1,000 metric tons of gold in 1970. China's production reached an all-time high of 280 metric tons in 2007. The South African mines on the Witwatersrand are getting deeper and more costly to operate than ever before. Production in the USSR peaked at approximately 311 tons of gold per year in 1956-1959 and reached 304 tons in 1989. Production in the USA peaked at 366 metric tons (11.7 million troy ounces) of gold in 1998, one third of South Africa's peak. Today, China, Australia, South Africa, and the USA each account for about 10 to 11% of the world's gold production.



Global coal production, per capita consumption, and population, 1980-2007. Source of data: U.S. Department of Energy – Energy Information Agency.

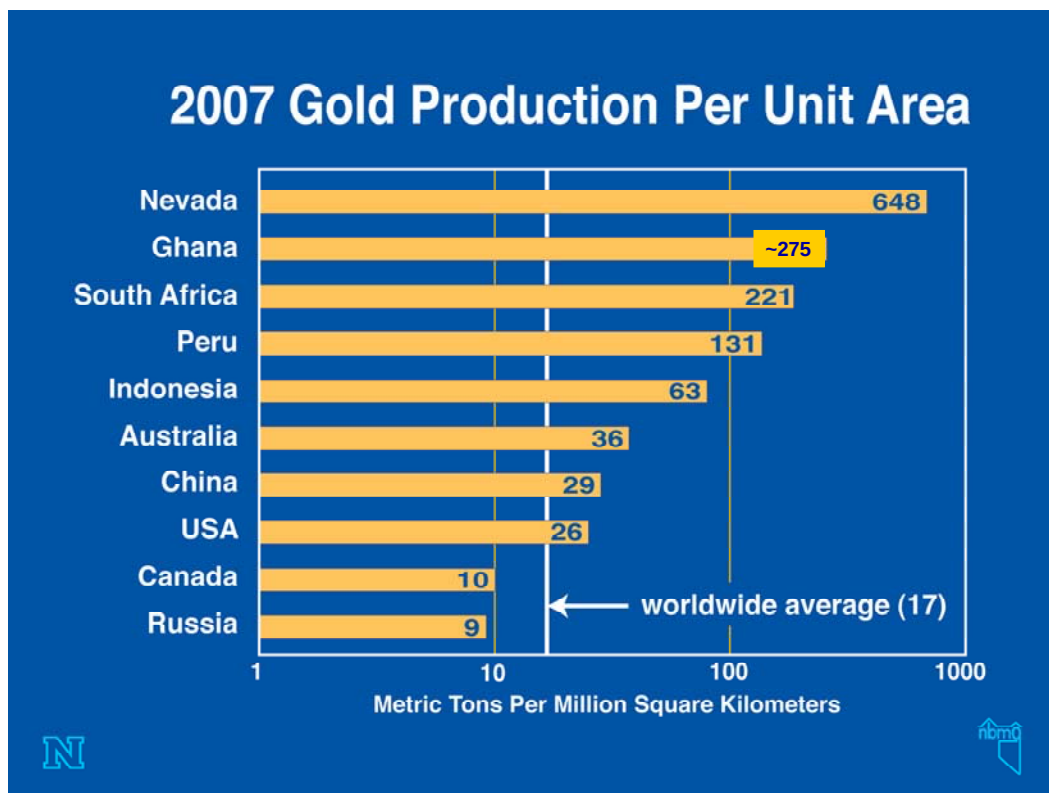


Percentage of annual global coal production by country, 1980-2007. Source of data: U.S. Department of Energy – Energy Information Agency.

For geological surveys and academia, the high level of demand for mineral resources is creating opportunities for such activities as geologic mapping and interpretation of the 4D geologic framework; geoscience sample and data preservation; and collaborations among states, universities, and the federal government on mineral-resource research, information, and policy.

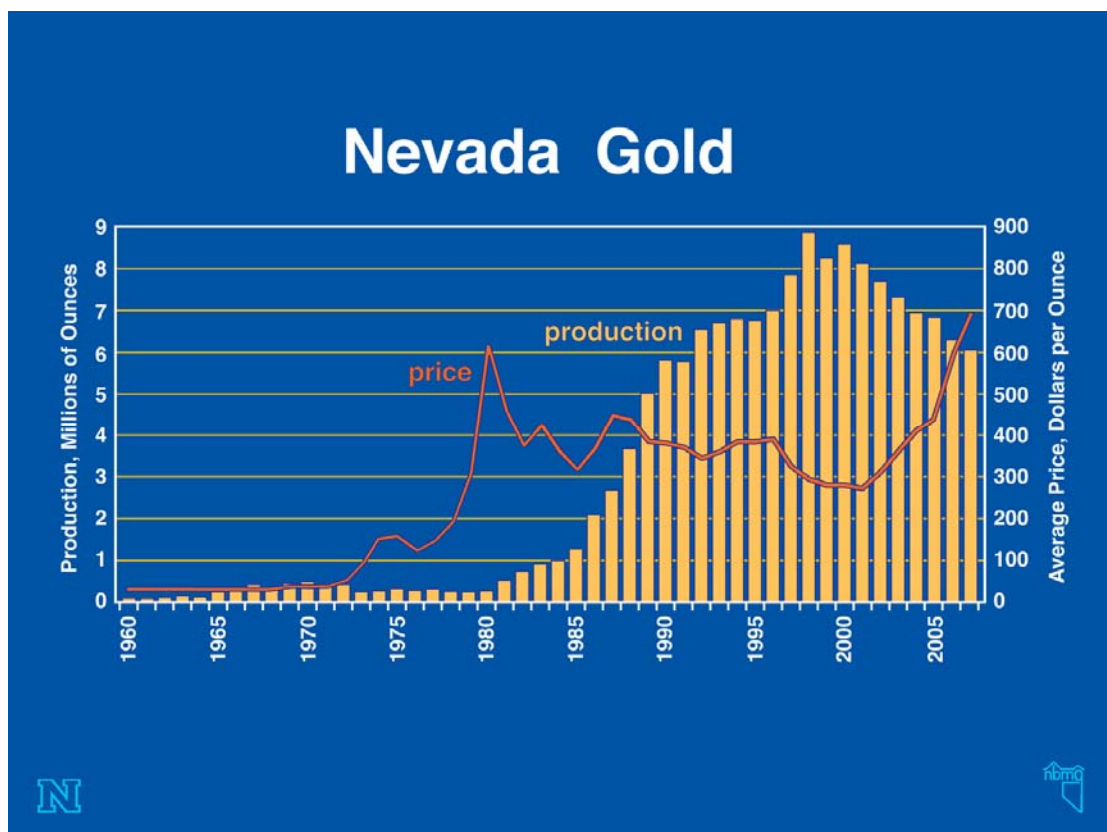
For industry, the global demand for minerals is creating opportunities for exploration both domestically and worldwide, particularly in areas with potential for large deposits. New opportunities exist for increased development and production, including new technologies for extracting metals from known deposits, and for sustainability, including the future of the environment, local and national economies, social and governmental stability, recycling, and substitutions of other minerals and products.

As a result of its favorable geology, Nevada has tremendous potential for the discovery of additional mineral deposits. Areas where prospective rocks exist beneath a cover of young, valley-filling sediments and volcanic rocks have only been explored to a limited extent, and ore deposits continue to be discovered in and near Nevada's 526 historical mining districts. Like Gauteng, the most productive region of South Africa, Nevada is a world leader in terms of gold production per unit area, as shown in the figure below.



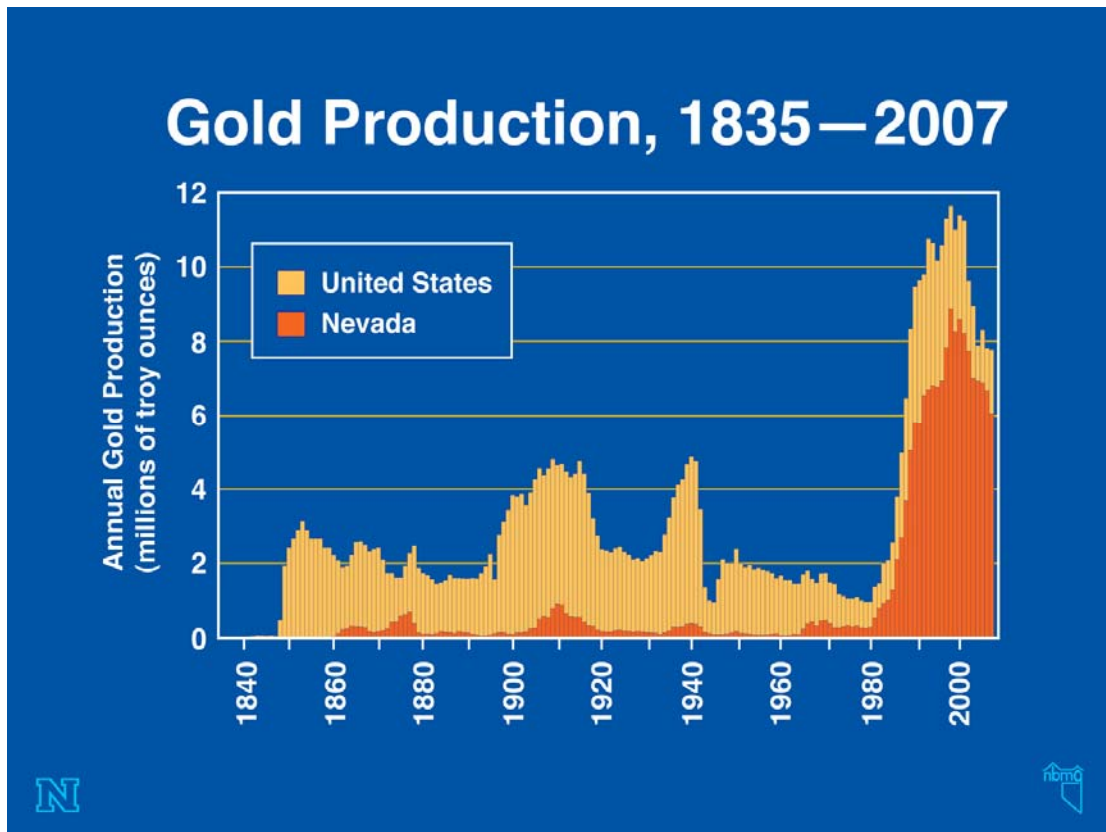
Through a survey conducted early in 2007, the Nevada Division of Minerals (NDOM) collected data for Nevada Bureau of Mines and Geology Special Publication P-19, *Major Mines of Nevada 2007*. This publication includes, in handbook form, location maps, names and telephone numbers of operators, numbers of employees, and nonproprietary production figures for most mines in Nevada. It also contains a section on economic impacts of the industry. The full contents are available for free on the World Wide Web (www.nbmng.unr.edu), as are the contents of this report. The data from the NDOM survey are used in this publication and, along with information from other sources, will be used to update, revise, and check preliminary statistics collected and released by the U.S. Geological Survey.

The section on **Metals** and the tables of **Major Precious-Metal Deposits** and **Other Metallic Deposits** provide details on new deposit discoveries, new mine openings, mine closures, additions to reserves, and mine expansions. As has been the case in recent years, gold has been the leading commodity produced in Nevada. Production of gold in 2007 came from 22 major mining operations. The Carlin trend in northeastern Nevada accounted for 49% of the total production. Eleven additional mining operations, not on the Carlin trend, each produced over 100,000 ounces of gold from mostly multimillion-ounce deposits.



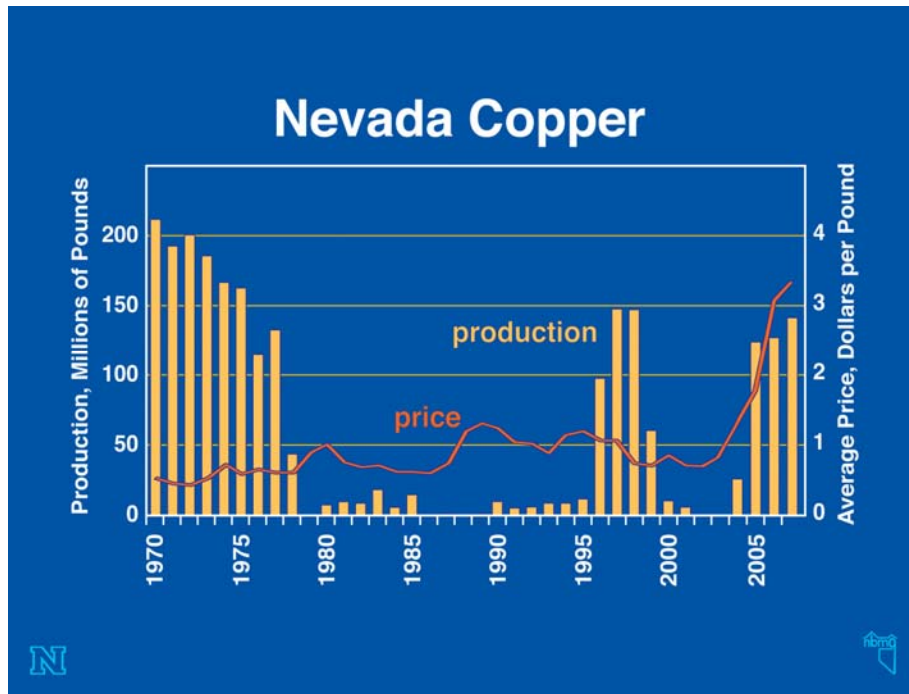
Nevada and the U.S. have produced a significant portion of world gold. The U.S. Geological Survey estimates that total world gold production, since the beginning of civilization, has been approximately 157,000 metric tons (5.0 billion troy ounces). Interestingly, about 85% of that gold is still in use (in bullion, coins, jewelry, electronics, etc.), and most gold currently being mined and used is recycled. Through 2007, cumulative gold production in Nevada (beginning with the Comstock Lode in 1859) stands at 5,464 metric tons (176.67 million ounces). Remarkably, 86% of this total has been produced since the Carlin Mine began production in 1965; 83% of this total has been produced during the current boom from 1981 to the present; and 43% of this total has been produced in the decade from 1998 to 2007. Total U.S. production, primarily since 1835, is approximately 16,500 metric tons (530 million ounces or nearly 11% of total world gold production), and total Nevada production is 3% of total world production. The Carlin trend alone accounts for 1.3% of all the gold ever mined in the world. By the end of 2007, cumulative production from the Carlin trend reached 2,131 metric tons of gold (68.5 million ounces), assuring its place as one of the most productive gold-mining districts in the world.

We continue to be in the midst of the biggest gold boom in U.S. history, as the graph of historical U.S. gold production illustrates. The recent surge in production in the U.S. is largely the result of discoveries of Carlin-type gold deposits and other deposits in which gold occurs primarily in grains that are too small to be visible to the naked eye. These deposits are primarily in Nevada. The U.S. production so far in the current boom, the period from 1981 to 2007, has been 210 million ounces. This is significantly greater than the total U.S. production during the era of the California gold rush (1849 to 1859, with 29 million ounces, although some estimates of unreported production may bring that figure up to 70 million ounces); the Comstock (Nevada) era from 1860 to 1875 (with 34 million ounces); and the period from 1897 to 1920, when Goldfield (Nevada), the Black Hills (South Dakota), Cripple Creek (Colorado), and by-product gold production from copper mines in Arizona and Utah contributed to cumulative production of 95 million ounces. U.S. production in the decade from 1998 to 2007 alone was 95 million ounces. The current boom is bigger than previous booms not only in terms of cumulative production but also in terms of peak annual production (11.6 million ounces in 1998 versus 4.8 million ounces in 1909, 2.6 million ounces in 1866, and 3.1 million ounces in 1853) and duration (at least 28 years for the current boom versus no more than 24 years for any of the earlier booms).

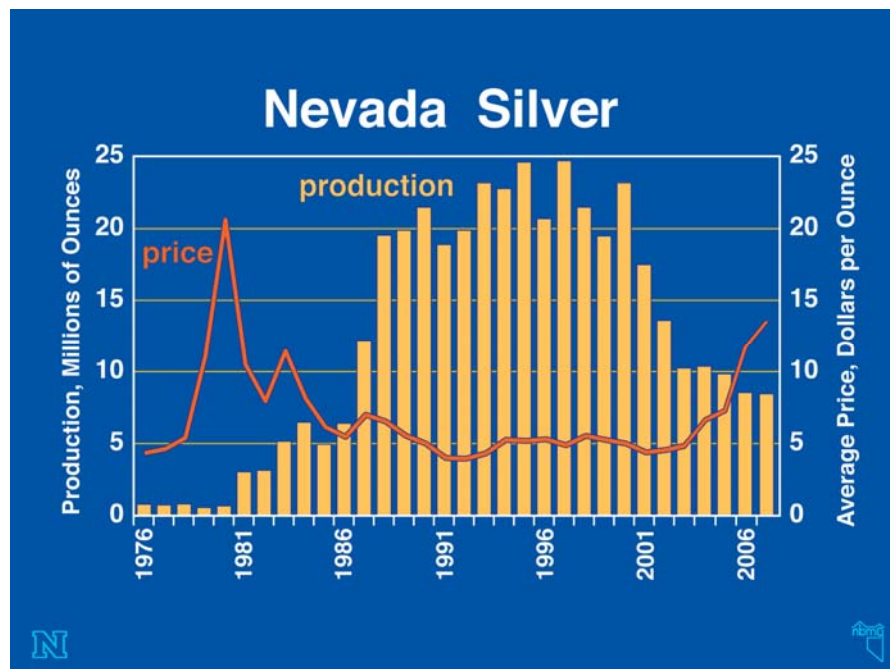


In 2007, Barrick Gold Corporation's Betze-Post Mine in Eureka County produced 1.2 million ounces, making it the largest gold mine in the state, and Barrick's Meikle Mine in Elko County produced 413 thousand ounces, making it the largest underground producer. Barrick was the largest gold producing company in Nevada in 2007, both on the Carlin trend and statewide. Newmont Mining Corporation's production on the Carlin trend totaled 1.3 million ounces, helping to make it the second largest gold producer in Nevada. Combined, Barrick and Newmont accounted for 84% of Nevada gold production in 2007. Copper production, dominated by the Robinson copper-gold-silver mine, operated by Quadra Mining Ltd. near Ely in White Pine County, was enhanced by by-product copper at Newmont's Phoenix project near Battle Mountain in Lander County. Golden Phoenix dramatically increased production from its Ashdown molybdenum mine in northwestern Humboldt County.

Much of Nevada's silver production in 2007, which totaled 8.43 million ounces, was a co-product or by-product of gold mining. With a ratio of value (average price of gold to average price of silver) of 52:1 in 2007, only those deposits with more than 52 times as much silver as gold can be considered primary silver deposits. Only one such



deposit operated in Nevada in 2007—the Coeur Rochester Mine in Pershing County (with a silver to gold production ratio of 92:1 and total silver production of 4.6 million ounces). This one mine produced 55% of Nevada's silver in 2007. Nevada's production in 2007 accounted for 21% of the U.S. total and 1.3% of the world total. Although the Coeur Rochester Mine is approaching closure, and production in Alaska now makes it the leading silver producer in the country, by-product silver production allows Nevada to justify its nickname, the "Silver State," on the basis of both historical and present-day production.

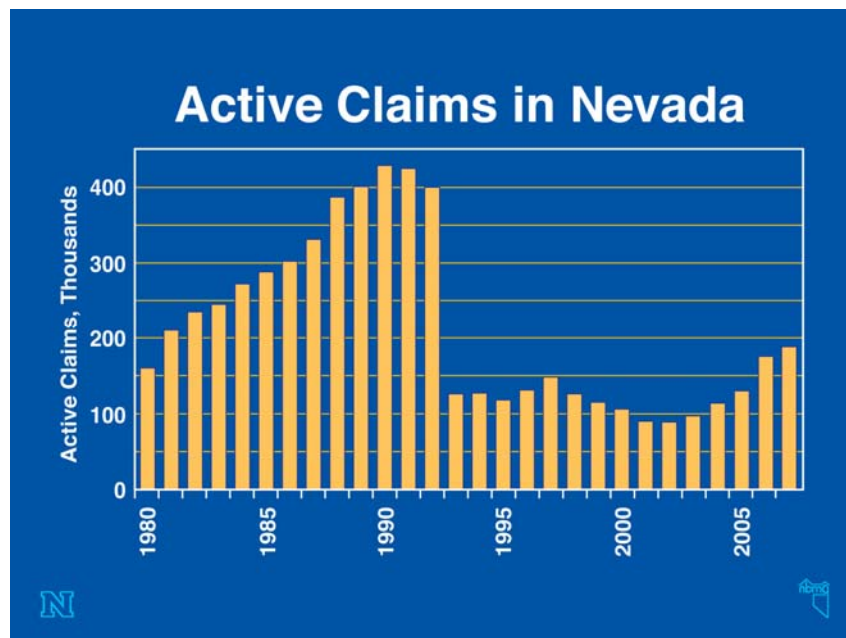


Exploration in 2007 (summarized in the section on **Metals**) included high-grade (mostly vein and breccia) targets, which tend to be popular during times of depressed prices for gold, and low-grade, large tonnage deposits, which generally become more profitable when gold prices are higher. Average gold price in 2007 was \$695 per ounce, well above prices in the previous six years (\$603 in 2006, \$440 in 2005, \$410 in 2004, \$363 in 2003, \$310 in 2002, \$280 in 2001). New discoveries were reported in several districts. To help guide exploration for concealed deposits below alluvial or young volcanic cover, geologists are successfully employing various geophysical methods (seismic, electrical, magnetic, gravity). At least 69 companies, ranging from juniors to majors, drilled at least 127 projects in Nevada in 2007. Exploration activity, including new claims staked, was reported in 16 of Nevada's 17 counties (with none reported in Carson City). Barrick is moving forward with underground development of the Cortez Hills deposit in Lander County, a multimillion-ounce gold deposit that was discovered in 2004.

Most exploration focused on gold and silver, but high prices have stimulated exploration for several other commodities, including copper, molybdenum, tungsten, iron, uranium, and zinc. Advanced exploration projects at previously delineated deposits show promise for major developments, particularly in the Yerington district in Lyon County (at the Ann Mason copper deposit and the Lyon/Pumpkin Hollow copper-iron deposits) and at the Mount Hope molybdenum deposit in Eureka County.

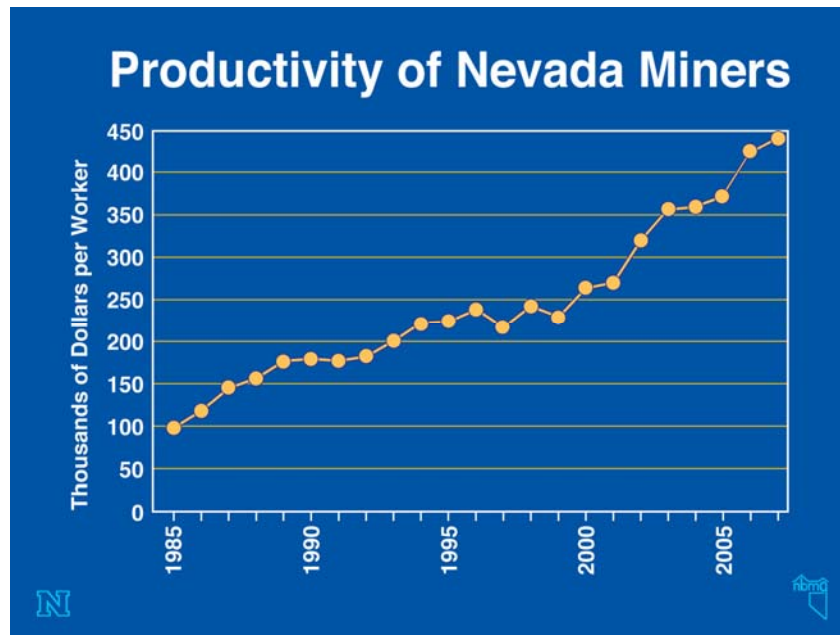
According to a survey of exploration activities by the Nevada Division of Minerals (D. Driesner and A.R. Coyner, 2008, Nevada Exploration Survey 2007, available at <http://minerals.state.nv.us/>), exploration activity in Nevada has been steadily increasing since 2001, when companies reported \$51.2 in expenditures in Nevada. The 31 companies responding to the survey reported spending \$167.9 million on exploration in Nevada in 2007, slightly more than the \$164.9 million in 2006 but substantially higher than the \$121.3 million reported in 2005 or the \$79.7 million reported in 2004, and well above the level of \$138.8 million in 1995. The companies continue to be optimistic about Nevada's potential and report that they project spending \$197 million in 2008. Another measure of exploration activity is the number of exploration geologists employed by these companies: 227 in 2007, compared with 228 in 2006, 190 in 2005, 123 in 2004, and 309 in 1997. These companies project employing 235 exploration geologists in 2008. Because of its favorable geology for high-priced mineral commodities and because of its regulatory climate, Nevada continues to attract a large portion of the

worldwide exploration expenditures of the companies actively exploring in Nevada. The number of active claims in Nevada rose substantially in 2007.



The announced gold resources in Nevada, including mineable reserves and perhaps some subeconomic resources (as reported in announcements by companies and compiled by the Nevada Bureau of Mines and Geology, with deductions for production), are enough to sustain gold production at multimillion-ounce levels for at least 20 years, assuming stable prices. The term “reserve” has special meaning with regard to U.S. securities laws. To be called a reserve, the deposit must be able to be mined profitably. With relatively high gold prices and continued technological improvements, some of the subeconomic resources of previous years have been upgraded to reserves. The Nevada Division of Minerals tabulated reported that the mining industry held 72.6 million ounces in gold reserves at the end of 2007, enough to sustain production at current levels for about 12 years.

Productivity of Nevada mining operations is exceptionally high. Measured simply by the value of the commodities produced divided by the number of employees, productivity of Nevada miners is outstanding. On the average, each of the 11,516 workers in the nonfuel mineral industry in Nevada produced approximately \$447 thousand in mined products in 2007, an all-time high figure.



Challenges that face the precious metal mines in Nevada include:

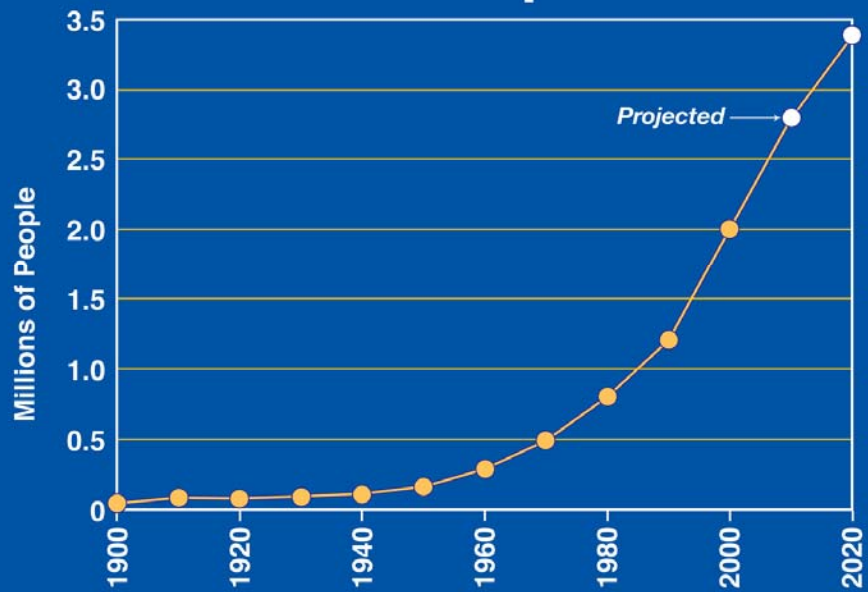
- economic, safety, and environmental concerns, particularly uncertainty in metal prices;
- the ability to replace mined-out reserves through “greenfield” and “brownfield” exploration, that is, in areas without and with previous mining, respectively;
- obtaining financial assurances (bonds) for reclamation and closure;
- sustaining local economies when, sometime in the future, mining ceases;
- hazards of underground mining;
- possible regulatory and mining-law changes;
- the length of time that it typically takes to obtain permits;
- preservation of archaeological and ecological resources;
- treating refractory (iron sulfide and/or carbon-bearing) ores, including innovative ways to oxidize these ores and to recover gold-bearing pyrite by flotation;
- dewatering mines;
- predicting the ultimate chemical compositions of pit lakes;
- procedures for closure of heaps used for leaching gold and silver from ore; and
- treatment and disposal of large volumes of water, some of which may be too warm to introduce directly into streams or may contain potentially toxic elements that need to be removed.

Industry is responding proactively to these challenges through research on and use of new technologies and engineering approaches, and through interaction with people in nearby communities,.

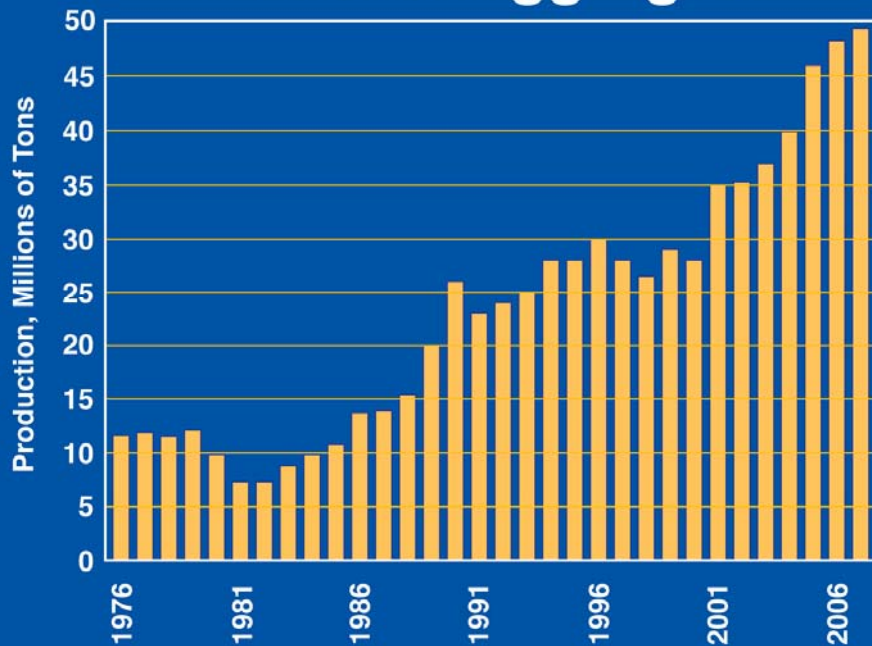
The section on **Industrial Minerals** covers developments during 2007 and gives details on important commodities produced from or processed in Nevada, including aggregate, barite, borate, cement, clays, diatomite, dimension stone, dolomite, gypsum, lime, limestone, lithium, magnesite and brucite, perlite, potassium alum (kalinite), salt, semiprecious gemstones (opal and turquoise), silica, and zeolites (clinoptilolite and mordenite). Three major operations in Lander and Elko Counties combined to produce over 95% of the barite mined in the U.S.; production was about the same in 2007 as in 2006. Chemetall Foote Corporation's Silver Peak lithium operation in Clayton Valley, Esmeralda County, where subsurface brines are evaporated on a playa, is the only domestic lithium producer, and Premier Chemicals' Gabbs Mine in Nye County is currently the nation's only hard-rock producer of magnesite.

Aggregate production was near its all-time high in 2006 as a result of Nevada's expanding population and need for construction materials for homes, schools, streets, highways, airports, resort hotels, and other businesses. Despite a significant slowdown in construction of new homes, hotels, and condominiums in Las Vegas, demand for construction raw materials is likely to remain strong because of Nevada's increasing population. According to the U.S. Census Bureau (www.census.gov), Nevada's population reached 2.565 million in 2006, up 28% from 1.998 million in the 2000 census. The booming population requires extraordinary amounts of construction raw materials. Population growth is particularly strong in the Las Vegas metropolitan area (Clark County). New cement plants are planned for both the greater Las Vegas and Reno markets. Gypsum production declined in 2007, relative to 2006, in part because of the construction slowdown in Nevada and California.

Nevada Population



Nevada Aggregate

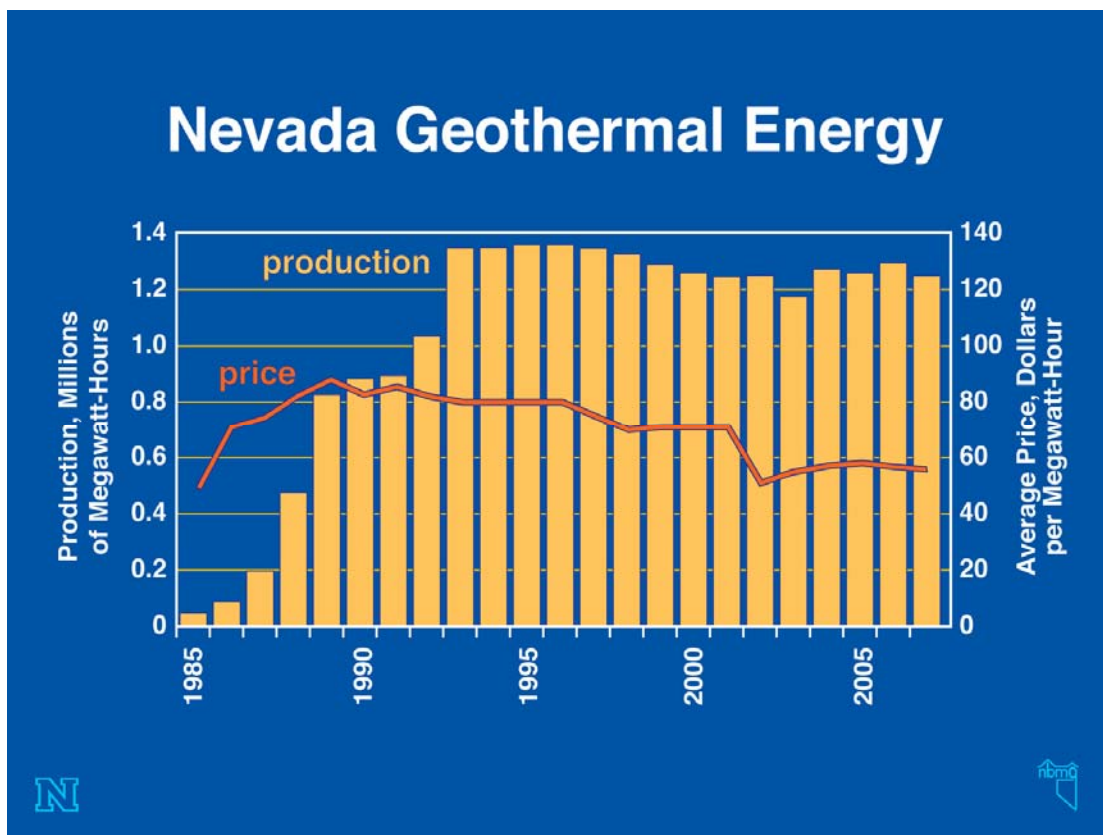


An interesting trend that is occurring in the Las Vegas area as well as nationwide is the combination of aggregate quarries with landfill operations. Planning for the eventual uses of quarries is vital in areas where urban expansion encroaches on the mineral resources. Aggregate is mined locally to reduce transportation costs and related concerns regarding highway safety. Post-mining land uses include suburban developments, landfills, and recreation areas. Gypsum mines near the urban growth areas of Las Vegas are now being considered as sites for housing developments.

Developments in the geothermal industry are covered in the section on **Geothermal Energy**. Electric power production and sales decreased from 2006 to 2007, but production capacity increased by 4.7%. Approximately 17 plants operating at ten sites sold \$69 million in electricity. Additionally, geothermal energy is used at numerous places in Nevada for space heating, domestic warm water, recreation, dehydrating vegetables, and other agricultural applications. Programs in the U.S. Department of Energy, energy bills passed by the Nevada and California legislatures, and activities of the Great Basin Center for Geothermal Energy at the University of Nevada, Reno are stimulating geothermal development in Nevada. Several new plants are planned to meet Nevada's renewable energy portfolio standard. Nevada Bureau of Mines and Geology Map 141, *Nevada Geothermal Resources*, shows the locations of geothermal plants, direct-use locations, hot and warm springs and wells; it demonstrates the fact that Nevada has considerable potential for geothermal development. Nevada Bureau of Mines and Geology Map 151, *Geothermal Potential Map of the Great Basin, Western United States*, provides regional information for assessing the potential for high-temperature (>150°C) geothermal systems. Considerable information on geothermal energy resources in Nevada is provided on the Web at: www.nbmng.unr.edu/geothermal/gthome.htm.

At a 2005 meeting of a taskforce set up by the Western Governors' Association to assess geothermal resource potential, geothermal energy experts estimated that within the next 20 years Nevada could add approximately 1,500 to 2,900 megawatts of geothermal power-generating capacity. If this potential were realized, and if energy prices continue to rise, geothermal power could become a billion-dollar per year business in Nevada. Power plants are currently under construction or in the production-drilling phase to bring an additional 250 megawatts on line soon. In December 2006, the Geothermal Energy Association released a report, available at

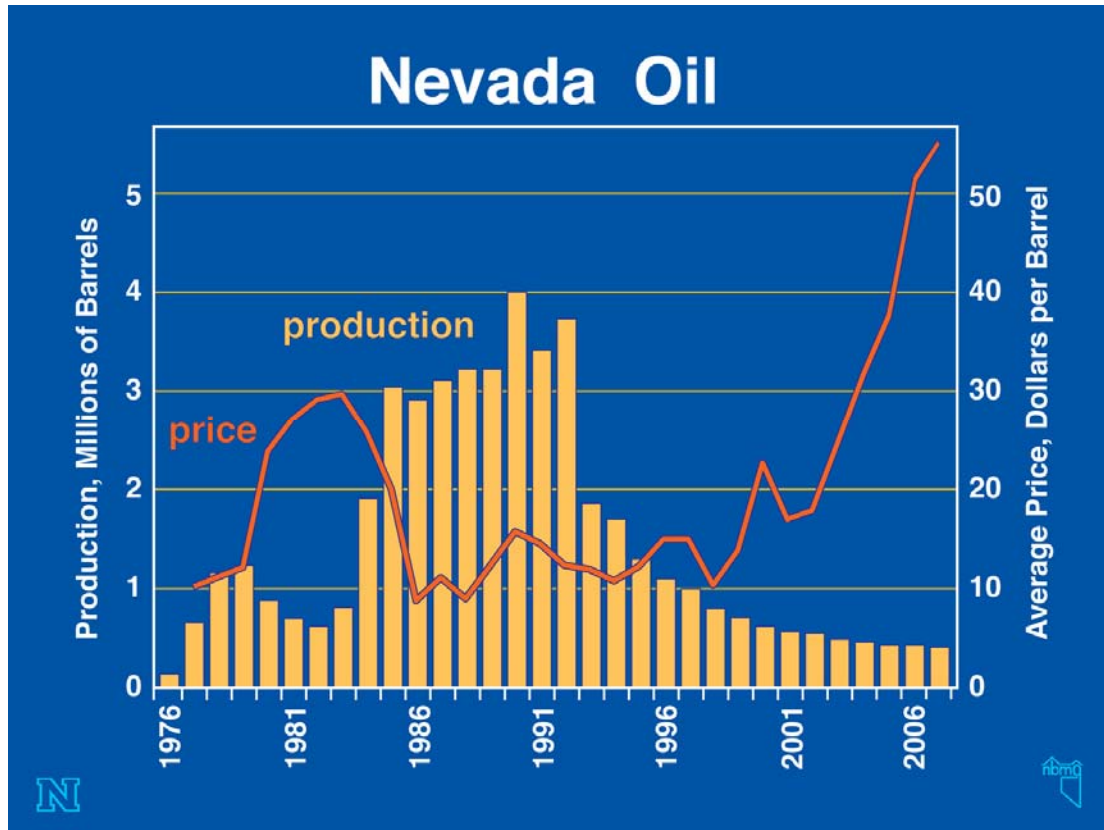
<http://www.geo-energy.org/publications/reports.asp>, that contends Nevada could be producing over 1,000 megawatts of geothermal power within three to five years (compared with average production in 2007 of 142 megawatts and a current production capacity of 277 megawatts). The report attributes the projected growth to several factors, including Nevada's renewable energy portfolio standard, a federal production tax credit, efforts of the Bureau of Land Management to reduce its backlog on leasing land for geothermal exploration and production, and federal funding for cost sharing of drilling, technical assistance, and applied research efforts of the Great Basin Center for Geothermal Energy.



Nevada has great potential for renewable energy (particularly geothermal, wind, and solar energy for electricity). Approximately 89% of Nevada's electricity currently is generated by power plants that burn fossil fuels, with 66% from natural gas and 23% from coal (2006 statistics from the Energy Information Administration, http://www.eia.doe.gov/cneaf/electricity/epa/generation_state.xls). Hydroelectric dams account for 6.5%, and other renewable energy sources (particularly geothermal power plants) account for about 4.2%.

Developments in the Nevada petroleum industry are covered in the section on **Oil and Gas**. Oil is produced primarily in two areas—Railroad Valley in Nye County and Pine Valley in Eureka County. Total annual oil production from Nevada (valued at \$23.5

million in 2007) is a minor part of U.S. production. The amount of Nevada oil production declined for the fifteenth consecutive year, and no new fields were discovered in 2007. Small amounts of co-produced natural gas are used to fuel equipment used for oil production. Value of Nevada oil production increased from 2006 to 2007 as a result of higher oil prices.



Relatively high oil prices and the 2003 discovery of oil at the Covenant field near Richfield in south-central Utah, where by the end of 2004 Wolverine Oil and Gas Corporation was producing 1,500 barrels per day from two wells, has stimulated exploration and leasing of federal lands in Nevada. According to the Utah Geological Survey, this oil field is in folded Jurassic Navajo Sandstone within the Sevier overthrust belt. Similar geological settings occur in eastern Nevada.

In 2005, the U.S. Geological Survey released its assessment of undiscovered oil and gas resources of the Eastern Great Basin (available at <http://energy.cr.usgs.gov/oilgas/noga/index.htm>), an area that includes the eastern portion of Nevada, western Utah, and part of southeastern Idaho. The U.S. Geological Survey estimates mean figures of 1.6 billion barrels of oil and 1.8 trillion cubic feet of natural gas remaining to be found in this region.

Exploration for oil in Nevada is encouraged by the cumulative production from the two premier fields in Railroad Valley, Grant Canyon and Trap Spring (21 million and 14 million barrels, respectively). Historically, few exploration wells have been drilled in the state (fewer than 1,000 wells, or fewer than one well per 111 square miles or 286 square kilometers). With so much area unexplored, even discounting areas underlain by high-grade metamorphic and granitic rocks, Nevada has the potential for finding more multimillion-barrel fields. Six new exploration wells were spudded in 2007, the same as in 2006 but down from 10 in 2005. In part because of high prices for oil and gas, and in part because of Nevada's small production relative to fields in California, Utah, and elsewhere, operators in Nevada have been unable to find the rigs needed for drilling that is permitted.

Additional information about the Nevada mineral industry and the U.S. gold industry, including the contents of selected publications, is readily available on line through the World Wide Web from the Nevada Bureau of Mines and Geology (www.nbmng.unr.edu/) and the Nevada Division of Minerals (<http://minerals.state.nv.us/>). Useful national and international data on nonfuel minerals can be obtained from the U.S. Geological Survey (<http://minerals.usgs.gov/minerals/>), and the U.S. Energy Information Administration (www.eia.doe.gov/) provides data on oil and gas, geothermal, and other energy sources. The Nevada Bureau of Mines and Geology supports several interactive maps on the Web that are backed by periodically updated databases on mineral and energy resources and potential, exploration activity, land ownership and restrictions, and other geographic information.

CONVERSION FACTORS

1 metric ton = 1.1023113 short ton = 1,000 kilograms = 2,204.6226 pounds = 32,150.7 troy ounces.

31.1035 metric tons = 1 million troy ounces (31.1035 grams = 1 troy ounce).

453.592 grams = 1 pound (avoirdupois) = 16 ounces (avoirdupois) = 14.5833 troy ounces.

34.2857 grams per metric ton = 34.2857 parts per million by weight = 1 troy ounce per short ton.

Metals

by John L. Muntean

PRODUCTION

Nevada produced 6.037 million ounces of gold, 8.430 million ounces of silver, 142.8 million pounds of copper and 0.31 million pounds of molybdenum in 2007. Gold production was down 278,585 ounces from 2006, a 4.4% decrease. The decrease marked the seventh consecutive year of declining production. Twenty-two mines in Nevada reported gold production in 2007. Forty-nine percent of production came from mines on the Carlin trend.

Barrick Gold Corp. and Newmont Mining Corp. once again dominated Nevada's gold production, accounting for 84% of production in 2007. Barrick produced the most gold, with production from its Betze-Post, Meikle, Bald Mountain, Ruby Hill, Cortez (60% share), and Turquoise Ridge Mines (75% share), plus its 50% share of the Round Mountain Mine's production and 33% share of the Marigold Mine's amounting to 2,746,540 ounces of gold, an 8% decrease from 2006. The decrease in Barrick's gold production was because of a 15% decrease at Betze-Post and a 55% decrease at Bald Mountain. Barrick was able to maintain its top spot mainly by commencing production at Ruby Hill and increasing production at Cortez. Newmont produced 2,340,669 ounces, reporting production from its Carlin trend mines and from its Twin Creeks, Lone Tree, Phoenix, Midas, Mule Canyon and Trenton Canyon Mines, plus its 25% share of the Turquoise Ridge joint venture.

Coeur d'Alene Mines Corp. produced 4,614,779 ounces of silver, entirely from its Rochester Mine. Coeur d'Alene ceased mining activity at Rochester in 2007, although leaching and silver recovery will continue until 2011. Newmont was the second largest silver producer, producing 2,115,162 ounces, primarily from its Midas and Phoenix mines.

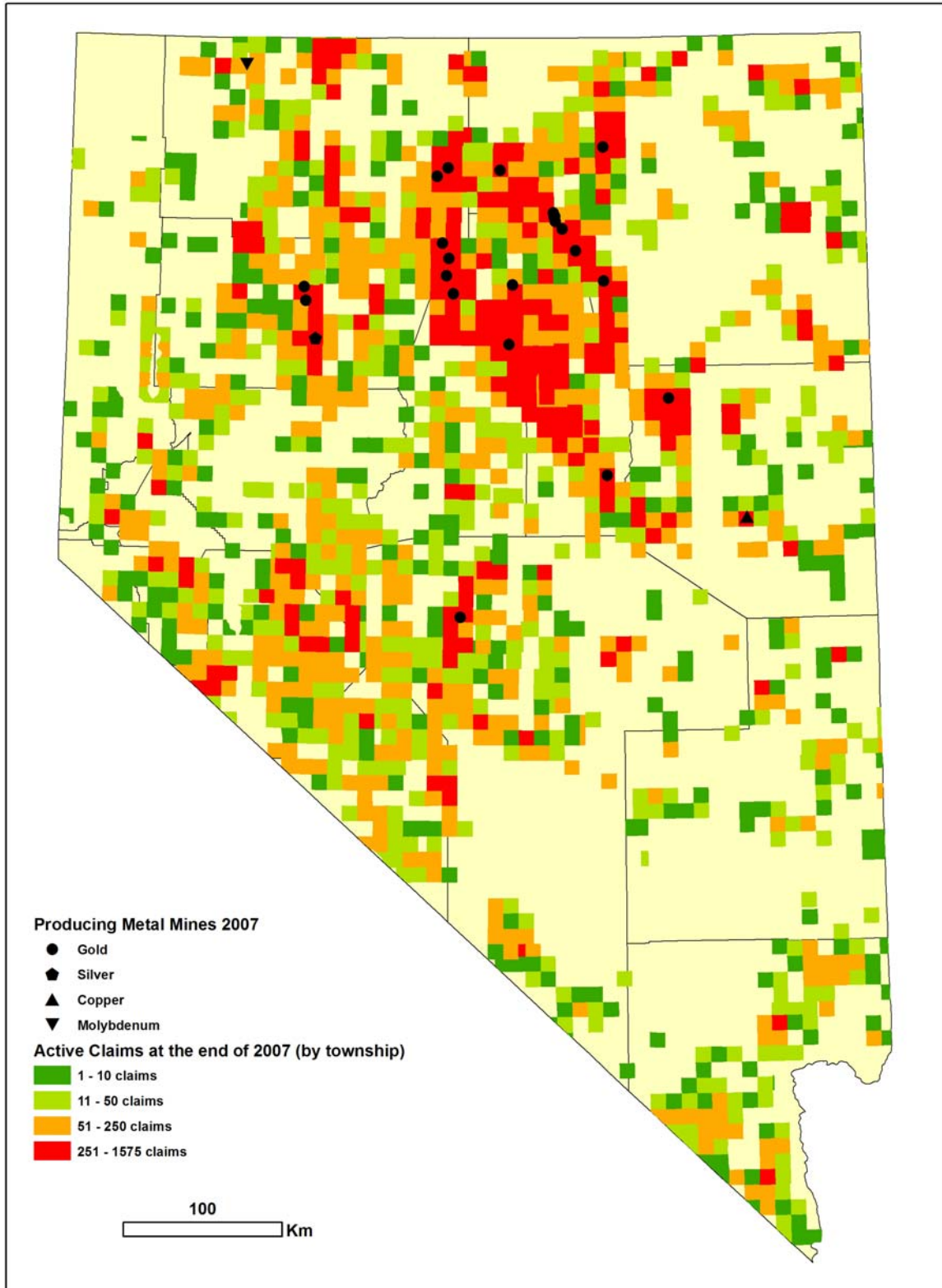
Quadra Mining Inc.'s Robinson Mine produced 92% of Nevada's copper in 2007, amounting to 131,986,134 pounds. Newmont's Phoenix mine made up the balance, producing 10,808,208 pounds. Golden Phoenix Minerals produced 247,466 pounds of molybdenum from its underground Ashdown Mine, and Quadra's Robinson Mine, the only other molybdenum producer in Nevada, yielded 62,033 pounds of molybdenum.

EXPLORATION

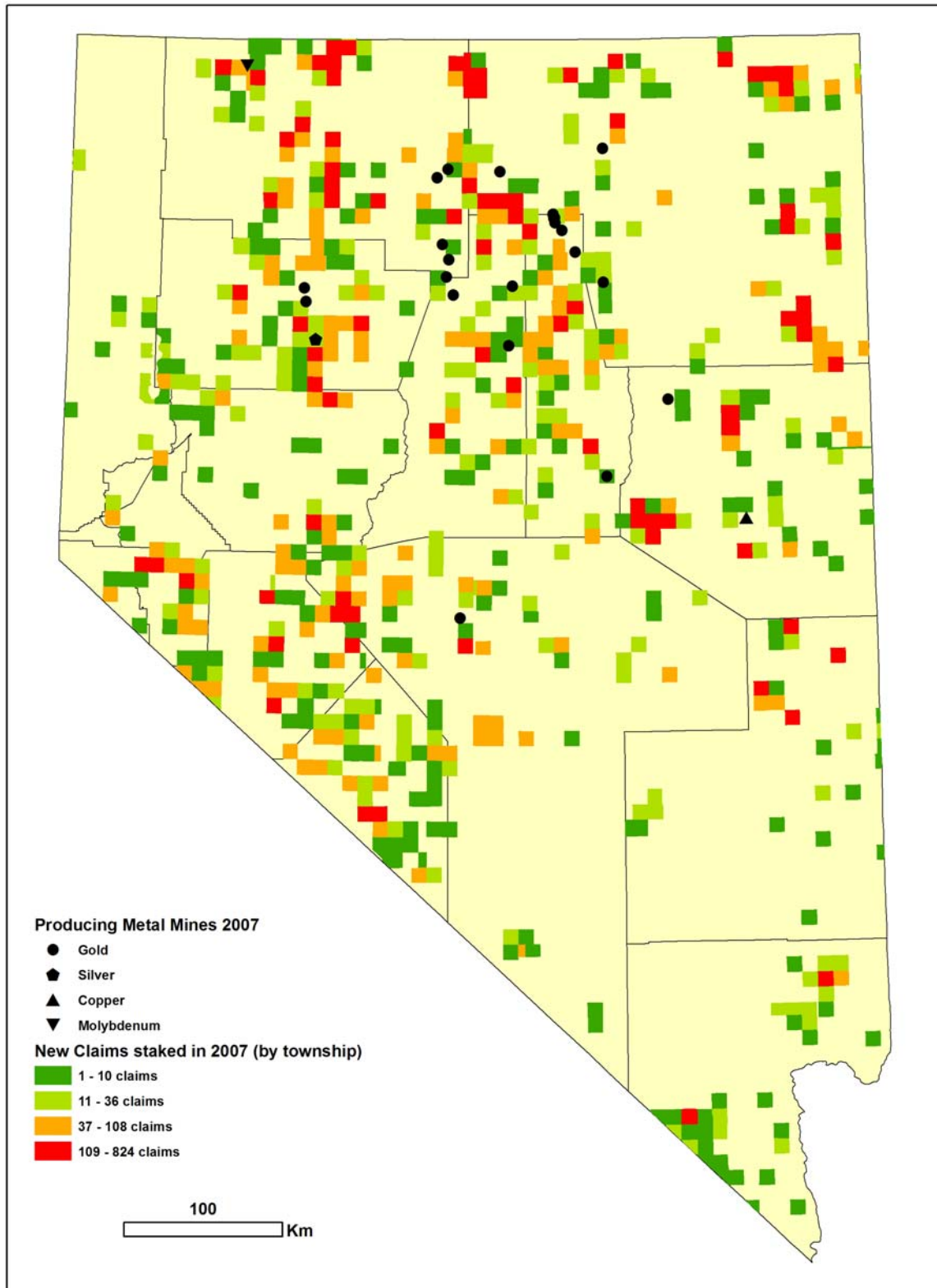
Exploration in Nevada continued in 2007 at an even greater pace than in 2006, and other metals besides gold continued to be increasingly targeted. Nevada county recorders registered 180,568 claim filings in 2007, an 18% increase from 2006 (fig. 1)¹. These included new claims and annual maintenance of existing claims. The U.S. Bureau of Land Management listed 33,556 new claims that were filed in 2007 (fig. 2)¹. Companies and individuals that staked the most claims in 2007 were Evolving Gold Corp. (2881), Western Energy Development Corp. (2027), Pediment Gold LLC (1249), Cougar Gold (1220), J.K. Cluer (1117) and Palisades Ventures (1025). Most of these companies focused on greenfields targets. Evolving Gold's staking was almost entirely in the Sheep Creek Range near and west of Midas and Ivanhoe, where it is targeting Paleozoic rocks beneath Miocene volcanic rocks. Farther north, Cluer's claims were on the Owyhee Plateau apparently targeting the northwest projection of the Carlin trend. Pediment Gold's claim blocks were based mainly on targets generated by exploratory groundwater chemistry. Cougar Gold's were mainly in the Dolly Varden copper district, whereas Palisades Ventures staked most of their claims near the old iron mines in the northern Cortez Range. At least 127 projects were drilled in 2007. Fifty-nine different junior companies drilled 85 of these projects, with the remainder drilled by 10 major or mid-tier companies² (fig. 3). More projects were likely drilled, especially small drill programs carried out by major or mid-tier companies, since these companies only occasionally release information on such projects. The main exploration objective in Nevada continued to be gold, though an increasing number of projects were drilled for silver, copper, molybdenum, tungsten, uranium, and gallium. For example, 16 of the 127 projects drilled in 2007 targeted metals other than gold compared to 2006, when 12 of 117 projects were drilled for metals other than gold.

¹ According to BLM's LR2000 database on 7/7/2007, 170,073 claims were active at the end of the 2006, including claims that were located near the end of 2006 but filed in early 2007. Also, the LR2000 database indicated on 7/7/2007 that 25,309 claims were staked in 2006, including claims that were located near the end of 2006 but filed in early 2007. These numbers from LR2000 were used to make the accompanying figures.

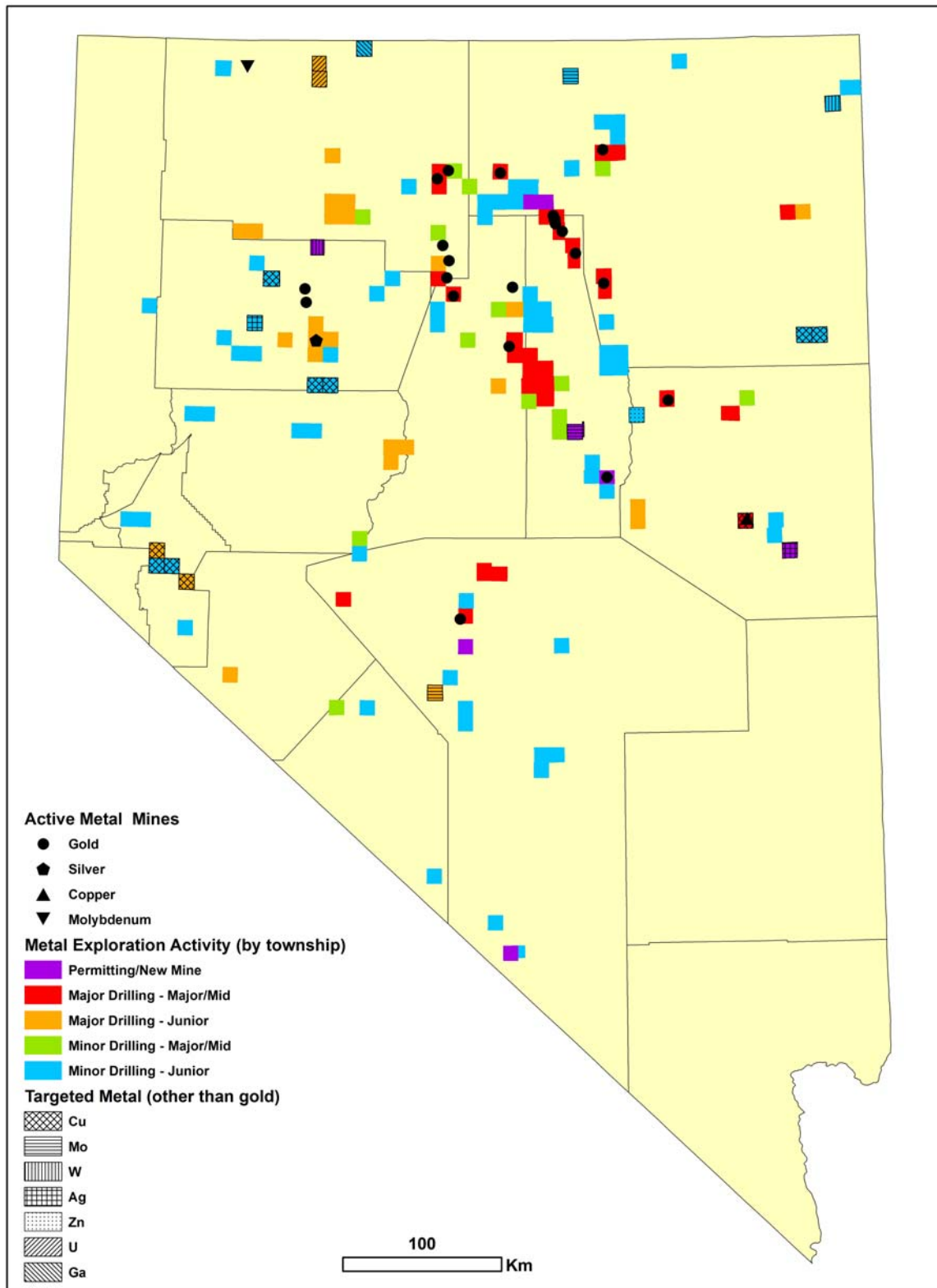
² The classification of companies into major, mid-tier, or junior in this section of the report is arbitrarily based on gold production and market capitalization. The loose criteria are as follows: 1) major companies produce greater than 1 million ounces of gold worldwide, and have market capitalizations of over \$3 billion, 2) mid-tier companies produce between 50,000 and 1 million ounces of gold and/or have market capitalizations less than \$3 billion but more than \$500 million, and 3) junior companies produce less than 50,000 of gold and/or have market capitalizations less than \$500 million.



Map showing distribution of active mining claims by township at the end of 2007. Source of data is the U.S. Bureau of Land Management's LR 2000 database.



Map showing distribution of new mining claims by township staked in 2007. Source of data is the U.S. Bureau of Land Management's LR 2000 database.



Map summarizing drilling and mine development activity by township in 2007.

GOLD

As in the last several years, major companies focused their exploration in and around their active mines in 2007. On the Carlin trend, Barrick continued to carry out major drill programs in and around its Goldstrike Mine, both on the surface and underground. It continued its feasibility study of the South Arturo deposit (60% Barrick, 40% Goldcorp). It also carried out major programs at its Cortez, Bald Mountain, and Turquoise Ridge (75% Barrick, 25% Newmont) mines. Barrick (including joint venture partner Kennecott Minerals) spent about \$28 million on exploration at Cortez. Most of the work concentrated on the Cortez Hills deposit, where a Record of Decision is expected in late 2008, after which production is expected to commence in late 2009 or early 2010. Production in the first five years from Cortez Hills is expected to be nearly one million ounces of gold per year. Newmont carried out large drill programs at its surface and underground mines along the Carlin trend and at its Midas and Phoenix mines. Other active mines with major drill programs in 2007 were Marigold (67% Goldcorp, 33% Barrick), Jerritt Canyon (Yukon-Nevada Gold Corp.), Robinson (Quadra), and Round Mountain (50% Kinross Gold Corp., 50% Barrick).

Substantial drill programs carried out by major or mid-tier companies targeting gold outside active mine areas include Hollister, Buffalo Valley, Northumberland, Rain, Pinson, Gabbs, West Pequop, Tonkin Springs and Limousine Butte. At Hollister in 2007, Great Basin purchased Hecla Mining's 50% interest, released a new resource estimate, and continued an aggressive underground exploration and development program. It expects to put the mine into production in late 2008. Newmont carried out major drill programs at Buffalo Valley, Rain, and Northumberland, where results were deemed not encouraging enough to continue. It returned Northumberland to Fronteer Development Corp. Barrick began a major program at Pinson, where it needs to spend \$30 million by April 2009 to earn back a 70% interest in the property from Atna Resources Ltd. Newcrest Mining Ltd. continued to drill at its Gabbs property near the old Paradise Peak and Sullivan mines, whereas Agnico-Eagle Mines Ltd. (joint venture with AuEx Ventures Inc.) drilled high-grade oxidized gold mineralization at two separate areas at its West Pequop project near Wells. US Gold spent \$20 million on its Nevada properties, mainly on Tonkin Springs and Limousine Butte. It drilled nearly 140,000 feet at Tonkin Springs, mostly in and around the existing resources. A modest increase in the resources was announced.

Much of the drilling for gold by junior companies in 2007 continued to occur around known, unmined deposits or inactive mines, commonly with old resource estimates. In addition to expanding a given resource beyond its margins, an important objective of many of these drill programs was to upgrade the resource estimate with infill and confirmation drilling in order to produce a new resource estimate that is compliant with current security and exchange regulations. Examples, in decreasing order of the amount of drilling completed in 2007, included the following projects:

Sleeper (X-Cal Resources Ltd.)	Wind Mountain (Fortune River Resource Corp.)
Pan (Midway Gold Corp.)	Lookout Mountain (Stacatto Gold Resources Ltd.)
Hycroft (Allied Nevada Gold Corp.)	Pony Creek (Grandview Gold Inc.)
Fire Creek (Klondex Mines Ltd.)	Afgan (Midway)
Converse (Metallic Ventures Gold Inc.)	Monte Cristo (Gold Summit Corp.)
Willard and Colado (Rye Patch Gold Corp.)	Railroad (Royal Standard Minerals Inc.)
Borealis (Gryphon Gold Corp.)	Reward (Canyon Resources Corp.)
Sandman (Fronteer)	Robertson (Coral Gold Resources Ltd.)
Relief Canyon (Firstgold Corp.)	White Rock (Golden Odyssey Mining Inc.)
New Pass (Bonaventure Enterprises Inc.)	Sterling (Imperial Metals Corp.)
Toiyabe (Golden Oasis Exploration Corp.)	Fondaway Canyon (Royal Standard)
Independence Mine (General Metals Corp.)	

New resource estimates were released for Willard, Colado, Sandman, Wind Mountain, Reward and Robertson, as well as Northumberland (Fronteer) and Jessup (Rye Patch). Increasingly, junior companies are putting in declines to explore resources from underground. Projects with underground development in progress or planned for 2008, which are controlled by junior companies, include Gold Wedge (Royal Standard), Sterling (Imperial), Fire Creek (Klondex, planned) and Midway (Midway, planned).

Most projects drilled by junior companies outside areas with historical resources were limited to small programs, typically less than 10 drill holes or less than 10,000 feet. The major exceptions that continued to experience successful drilling in 2007 were Midway's Spring Valley project and AuEx's Pequop claim blocks. Midway drilled 188 holes totaling 113,000 feet in 2007 at Spring Valley, a diatreme-hosted gold system completely covered by pediment gravels located near the Rochester silver mine. In January 2008, it significantly increased its inferred resource estimate, which now stands at just below one million ounces of gold. AuEx's joint venture partners continued to drill high-grade, oxidized gold mineralization on its Pequop properties near Wells. Agnico-Eagle's encouraging results at West Pequop were mentioned above. At Long Canyon, on the east side of AuEx's Pequop property, Fronteer continued to drill several intercepts of greater than 50 feet grading greater than 0.1 opt gold. Drilling has now defined a zone of oxidized gold mineralization that is almost 3,700 feet long.

It is reasonable to speculate whether the great increase in exploration that started around 2004 will reverse the trend of decreasing gold production in Nevada. Commencement of production at Cortez Hills in 2010 will be an important boost, but will be somewhat offset by decreasing production from the Pipeline open pit at Cortez. Besides Cortez Hills, gold projects that have a good chance to be put into production by 2010 include Hollister, Gold Wedge, Hycroft, Reward and Relief Canyon, based on released information and intentions of companies.

OTHER METALS

As rising demand sparks higher metal prices, companies are showing interest in targeting metals other than gold, such as copper, molybdenum, silver, tungsten, zinc, uranium and gallium. Most of the projects, which are being carried out exclusively by junior companies, are focused on areas with historical resources.

In addition to Quadra's active Robinson mine near Ely, the Yerington district is the focus of most copper exploration. At Pumpkin Hollow, Nevada Copper Corp. completed a \$7 million development program and released a new resource estimate and a preliminary economic assessment. At a copper price of \$3/lb, the company estimates a net present value of \$1.9 billion with capital costs estimated at \$780 million. Also in the Yerington district, Quaterra Resources Inc. expanded the limits of copper oxide mineralization at the MacArthur resource, and identified chalcocite mineralization at depth. Although likely a smaller resource than Pumpkin Hollow, the acid-soluble and shallow nature of the mineralization at MacArthur suggests capital costs would be lower. Pacific Magnesium Corp. continued to drill the Ann Mason resource area also near Yerington. Elsewhere, early-stage copper exploration took place in the Dolly Varden district in eastern Elko County (Consolidated Gold Win Ventures Inc. and Cloudbreak Resources), at Majuba Hill (Minterra Resources Corp.) about 40 miles north of Lovelock and in the Buena Vista Hills (Boxxer Gold Corp.) about 20 miles southeast of Lovelock. No activity was reported from the New York Canyon area east of Luning in Mineral County, which was the most significant copper exploration project in Nevada in 2005 and 2006.

In addition to Golden Phoenix's production of molybdenum from its underground Ashdown mine and Quadra's production of by-product molybdenum from its Robinson mine, General Moly Inc. (formerly Idaho General Mines) continued to permit the giant

Mount Hope porphyry molybdenum deposit northwest of Eureka. The company expects to have all permits by the first half of 2009. In addition, it completed a bankable feasibility study in 2007. It also made progress in financing the construction of the mine, which has an estimated initial capital cost of \$852 million, by entering into financing agreements with ArcelorMittal and POSCO. General Moly also began a pre-feasibility study of the Hall-Tonopah deposit. In addition to General Moly's advanced projects, Mexivada discovered a previously undrilled porphyry molybdenum system, referred to as Moly Dome, in northern Elko County near Owyhee. Drilling intersected molybdenite-pyrite-bearing quartz veinlets in brecciated metasedimentary rocks and altered granitic intrusions to a depth of at least 1000 feet. The system, which crops out locally, was originally identified by Anaconda Minerals prior to 1962.

Despite the high price of silver, only two projects were drilled primarily for silver in 2007. At the old Taylor mine near Ely, Fury Explorations Ltd. released a resource estimate of 14.9 million ounces of silver based on historic drilling and drilling that Fury completed in 2006 and 2007. Permitting is under way, and Fury plans to reopen the mine in 2009. AuEx and joint venture partner Piedmont Mining Co. continued to explore the Trinity silver mine near Lovelock by completing a small drilling program.

Galway Resources continued to evaluate the Indian Springs tungsten deposit north of Wells, releasing a new resource estimate. Golden Predator Mines, Inc. began work to reopen the old General Electric Springer tungsten mine. All improvements necessary to produce scheelite concentrates are scheduled for completion by the end of 2008. In addition, Golden Predator began to design a standalone 1,000 tpd gravity and carbon-in-leach gold circuit for the Springer Mine, for which permitting is under way. In anticipation of the completion of the tungsten and gold circuits, Golden Predator has been acquiring other properties with known tungsten resources, as well as gold exploration properties.

Western Energy Development Corp. continued to explore for uranium at its Kings Valley project along the east side of the McDermitt caldera in northern Humboldt Canyon. It released an inferred resource of three million tons grading 0.081% U_3O_8 . Nearby, Gold Canyon Resources Inc. continued to develop its gallium resource near the old Cordero mercury mine close to the town of McDermitt. Cypress Development Corp. evaluated its Gunman zinc-silver prospect near Ely.

Exploration activity is summarized below by county and district. Projects that were drilled in 2007 are emphasized. Production, reserves and resources of gold and silver are updated in the section "Major Precious-Metal Deposits." Recent production,

reserves, and resources from projects producing or targeting other metals are listed in the section “Other Metallic Deposits.”

CHURCHILL COUNTY

Aspen District

Baxter. Fortune River Resources Corp completed 13 reverse circulation holes totaling 9,725 feet at seven vein/fault zones. Holes at two of the zones, Chugiak and Last Chance, intersected several narrow intervals of gold mineralization, with each zone having strike lengths of greater than 2,000 feet. The best intercept was 15 feet grading 0.036 opt gold, which included five feet of 0.098 opt gold. (Fortune River Resources Corp. press release, 10/31/2008; Fortune River website, www.fortuneriver.ca)

Broken Hills District

Mud Springs. Fortune River Resource Corp. drilled seven reverse circulation holes for a total of 4,583 feet, targeting gold-silver veins. Although no assay results were released, the company reported that geochemical zoning and alteration suggest molybdenum mineralization may be present at depth. (Fortune River Resources Corp. press release, 10/31/2008; Fortune River website, www.fortuneriver.ca)

Jessup District

Gypsum Valley. Four reverse circulation holes totaling 2,040 feet were drilled by Tournigan Gold Corp. in a joint venture with AuEx Ventures Inc. in order to test an intensely argillized north-trending fault. Although intervals of greater than 0.003 opt gold were encountered, no assays above 0.010 opt gold were reported. (AuEx Ventures Inc. press release, 12/7/2007; AuEx website, www.auexventures.com)

Jessup. Rye Patch Gold Corp. released a new resource estimate that incorporated drilling completed by Pan-Nevada Gold Corp. in 2006. The indicated resource is estimated to be 5,423,000 tons at 0.022 opt gold (120,000 ounces of gold) and 0.31 opt silver (1,655,000 ounces of silver). The estimated inferred resource is 1,265,000 tons at

0.017 opt gold (22,000 ounces of gold) and 0.23 opt silver (286,000 ounces of silver). Rye Patch Gold acquired the property from Midway Gold Corp., who obtained the property when they acquired Pan-Nevada Gold in early 2007. (Midway Gold Corp. press release, 4/13/2007, 8/21/2007; Rye Patch Gold Corp. press release, 8/21/2007, 12/11/2007)

New Pass District

New Pass. Bonaventure Enterprises Inc. (joint venture with US Gold Corp.) completed a 33-hole reverse circulation drill program, totaling 16,758 feet. Drill hole NP-0701, an offset of a previous intercept in the far northwest corner of the drill grid, intercepted 10 feet grading 0.05 opt gold and, below, an additional 40 feet averaging 0.029 opt gold and 0.850 opt silver. Both holes intercepted a previously unrecognized, interpreted northwest-trending fault zone that is about 500 feet west of the resource area. Drilling along the east side of the resource area produced encouraging results, including 185 feet of 0.027 opt gold and 0.25 opt silver that contained five feet of 0.295 opt gold and 0.56 opt silver in hole NP-0722 (25-210 feet). (Bonaventure Enterprises Inc. press release, 2/26/2008; Bonaventure website, www.bonaventure.us)

Shady Run District

Fondaway Canyon. Royal Standard Minerals Inc. completed a sonic drill program on the old heap leach pad at Tenneco Mineral's former gold mine at Fondaway Canyon. Chemical analyses of the leach pad drilling did not return results that would warrant moving the material to a new pad in order to be re-processed. (Royal Standard Minerals Inc. press release, 10/22/2007; Royal Standard website, www.royalstandardminerals.com)

Truckee District

Fireball Ridge. Tournigan Gold Corp. (joint venture with AuEx Ventures Inc.) drilled 18 reverse circulation holes totaling 7,060 feet that were designed to explore for gold mineralization along two northeast-trending faults which form a horst block. The best

intercept was 55 feet grading 0.022 opt gold. (AuEx Ventures Inc. press release, 12/7/2007; AuEx website, www.auexventures.com)

ELKO COUNTY

Bootstrap District

REN. Centerra Gold Inc. continued to drill at its REN project, although no results were released. Barrick Gold Corp., Centerra's joint venture partner at REN, elected not to participate in further exploration on the property. In its 2007 year-end Management and Discussion Analysis, Centerra stated it was considering its options for the property, which include selling or finding a joint venture partner for its interest in the REN project. (Centerra website, www.centerragold.com)

South Arturo. Barrick Gold Corp. continued a feasibility program at its South Arturo discovery (60% Barrick, 40% Goldcorp). Drilling also continued on the Hinge and Button Hill discoveries, parallel north-south deposits, located northeast of South Arturo. (P. Dobak, Barrick Gold Corp., oral commun., December, 2007; Barrick Gold website, www.barrick.com)

Storm. Barrick Gold Corp. commenced production on the underground Storm deposit in April (60% Barrick Gold, 40% Yamana Gold Inc.). (Meridian Gold Inc. press release, 7/25/2007)

Carlin District

Rain. Newmont Mining Corp. carried out a drill program in and around its Rain gold deposit. (R. Reid, Newmont Mining Corp., oral commun., December, 2007)

Delano District

Indian Springs. In May, Galway Resources released a resource estimate for its Indian Springs tungsten deposit. The indicated resource is estimated to be 10.8 million tons grading 0.171% WO₃ (37 million pounds of WO₃), and the estimate of the inferred

resource is 8.2 million tons grading 0.167% WO₃ (27 million pounds of WO₃). Both estimates used a cut-off grade of 0.1% WO₃. The estimate was based on 62,000 feet of drilling in 299 holes, 24 holes (8,200 feet) of which were drilled by Galway in 2006. The remainder is historic drilling completed by Placer Amex, Union Carbide, and Utah International between 1970 and 1982. After releasing the resource estimate, Galway completed an additional 15-hole (7,000 foot) in-fill drill program. Highlights included hole ISC07-125 that intercepted 66 feet grading 0.33% WO₃ (78-144 feet) and hole ISC07-137 that intersected 88 feet averaging 0.28 % WO₃ (13-101 feet) and 170 feet grading 0.17% WO₃ (118-288 feet). The geology at Indian Springs consists of an east-dipping sequence of Permian clastic and carbonate sedimentary rocks that have been intruded by a two-mica quartz monzonite stock. Early stage garnet-diopside-epidote skarn assemblages with minor scheelite replaced calcareous sandstone units of the Permian Lower Pequop Formation on the east flank of the stock. Later intrusive granitic dikes and associated quartz-topaz-muscovite (greisen) alteration and quartz-sulfide veining were superimposed on the skarn. The bulk of the tungsten mineralization is associated with the later stage dikes, alteration, and quartz-sulfide veins. Unmineralized Permian age carbonate sedimentary rocks and thin alluvial and volcanic rocks cover part of the deposit and its extensions. (Galway press releases, 5/1/2007, 9/26/2007, 12/6/2007, 2/7/2008, 2/20/2008; Galway website, www.galwayresources.com)

White Rock. Golden Odyssey Mining Inc. drilled at least two core holes at White Rock, an advanced project with four known mineralized gold zones defined by Amax Gold in the 1980s. The project is located east of the Delano district, near the Utah border. The holes were drilled to twin historic reverse circulation holes to confirm the existing resource. Results were released only for the first hole, which was drilled in the Central Zone where a non-compliant resource of 100,000 ounces of gold exists. Gold assays agreed well with the previous hole. The best intercept was 111 feet grading 0.022 opt gold. (Golden Odyssey Mining Inc. press releases, 10/4/2007; 10/23/2007; Golden Odyssey website, gomininginc.com)

Dolly Varden District

Dolly Varden. Beginning in November 2006, Consolidated Gold Win Ventures Inc. drilled 15 core holes. The drill holes were located about 5.5 miles east of the old Victoria

mine. The first hole (DV-06-3) intersected 75 feet averaging 0.66% copper from 441 to 516 feet in depth. Mineralization appears to be in a partially oxidized pyrite-chalcopyrite replacement body. The hole was drilled on the north end of a 3,000 foot-long induced polarization anomaly. Five subsequent holes were drilled nearby to try to offset the mineralization in hole DV-06-3. The best intercept was 1.5 feet grading 0.51% copper (hole DV-06-05) and 39.5 feet averaging 0.14% copper, which included 20 feet grading 0.20% copper (hole DV-07-16). Two holes were drilled approximately 2,500 feet to the southeast. Both holes encountered scattered mineralization. The best interval was four feet grading 0.02% copper. Four holes were drilled 2,000 feet south of the first area along the main induced polarization anomaly. Significant sulfide mineralization was encountered in all four holes. The best interval was two feet averaging 0.29% copper. Results suggested zoning of copper, gold, lead, zinc, and silver values across the property. (Consolidated Gold Win Ventures Inc. press releases, 12/5/2006, 1/11/2007, 7/25/2007, 10/22/2007; Consolidated Gold website, www.v-cgw.com)

Dolly Varden West. Cloudbreak Resources completed two core holes totaling 1,046 feet on its Dolly Varden West project, which is located about a mile west of Consolidated Gold Win Venture Inc.'s claim block. Both holes were drilled off a single permitted site, one to the north and the other to the south. Both holes intersected silicified and broken limestone with limonite staining and veining throughout most of their lengths. The best intervals were five feet grading 0.396% lead and 0.469% zinc in the hole drilled to the north and two feet of 0.007 opt gold in the hole drilled southward. (Cloudbreak Resources press releases, 7/12/2007, 7/24/2007, 1/4/2008; Cloudbreak website, www.cloudbreakresources.com). Seven hundred new claims were located in the Dolly Varden district in 2007, mainly in the name of Cougar Gold L.L.C. (BLM LR2000 database)

Edgemont District

Moly Dome. Mexivada discovered a previously undrilled porphyry molybdenum system, referred to as Moly Dome, in northern Elko County near the town of Owyhee. Three core holes totaling 3,944 feet were completed. Hole MD07-1 was drilled to 1,505 feet at an angle across surface exposures of molybdenite-pyrite-quartz veins located at the Moly Shaft prospect and an induced polarization chargeability anomaly located below

Moly Shaft. Molybdenite-pyrite-bearing quartz veinlets in brecciated metasedimentary rocks and altered granitic intrusions were encountered in the drill hole. The intrusions are believed to be part of the 80-91 Ma Mountain City granitic intrusive complex. An intercept of stronger mineralization, grading greater than 0.02% MoS₂, was found between 299 and 715 feet. The best intervals in that intercept were five feet grading 0.626% MoS₂ and 85 feet averaging 0.043% MoS₂. Hole MD07-2, drilled at an angle to 1,087 feet, targeted a separate induced polarization anomaly. Although no significant molybdenum mineralization was intercepted, pyritic metasedimentary rocks and wide intervals of enriched tungsten with values up to 0.056% tungsten were found. Hole MD07-3 was drilled north of MD07-1 at an angle to 1,351 feet. A zone of molybdenite veins along the margins of a quartz stockwork zone was intercepted between 995 and 1,340 feet. The best intercept was five feet grading 0.101% MoS₂. In all three holes, molybdenite mineralization and/or quartz stockworks are crosscut by quartz-sulfide and quartz-carbonate veins that contain up to 0.053 opt gold, 9.33 opt silver and 206 ppm tellurium in 5-foot intervals. The Moly Dome system was originally identified by Anaconda prior to 1962. (Mexivada press releases, 11/8/08, 12/18/08, 4/21/08, Mexivada website, www.mexivada.com)

Gold Circle District

Clover. Yamana Gold Inc. (joint venture with Atna Resources Ltd.) completed seven reverse circulation holes totaling 5,320 feet. The holes ranged in depth from 600 feet to 915 feet and were inclined at various angles to cut the structural zones thought to host the gold and silver mineralization. Yamana intersected encouraging gold-silver mineralization including 35 feet grading 0.321 opt gold and 0.54 opt silver (hole CV006) and 25 feet grading 0.03 opt gold and 7.97 opt silver (hole CV007). Yamana's drilling followed up drill intersections reported by previous owners in the Clover Hill area of the property, which included an intercept of 32 feet grading 0.76 opt gold, including 2.5 feet grading 8.27 opt gold and 6.69 opt silver. The Clover project is a low-sulfidation, vein-hosted, epithermal gold prospect located adjacent to the Midas trough within the Northern Nevada Rift. (Atna Resources press release, 2/20/08)

Midas. Newmont Mining Corp. continued to explore its Midas Mine. Exploration focused on the Colorado Norte and Grizzly veins as well as on the Portal-Gift/Link trend. (R. Reid, Newmont Mining Corp., oral commun., December, 2007)

Independence Mountains District

Big Springs. Work by Gateway Gold Corp. in 2007 focused on the Lower Mac Ridge area, where lower plate³ rocks are exposed at the surface and had gold values as high as 0.063 opt over 60 feet in trenches sampled by Gateway in 2006. Seventeen holes were drilled, totaling about 7,000 feet. The best intercepts were located at the southeast end of the Lower Mac Ridge area. Hole MR-07-01 returned 65 feet grading 0.049 opt gold (0-65 feet), including 25 feet averaging 0.108 opt gold, and hole MR-07-03 intersected 50 feet grading 0.077 opt gold (10-65 feet). The intercepts were visibly oxidized. (Gateway Gold press releases, 10/25/07, 12/12/07; Gateway Gold website, www.gatewaygold.com)

Golden Dome. Gateway Gold Corp. drilled 13 holes totaling approximately 6,000 feet. No results have been released. (Gateway Gold press release, 7/9/07; Gateway Gold website, www.gatewaygold.com)

Jerritt Canyon. In June, Queenstake Resources Ltd.'s merger with YGC Resources Ltd. to form Yukon-Nevada Gold Corp. was finalized. Proven and probable reserves at Jerritt Canyon increased to 717,300 ounces of gold, which represents a net addition of about 350,000 ounces after 2007 production of 121,700 ounces is taken into account. In 2007, surface drilling totaled 229,087 feet from 220 reverse circulation holes and 15 core holes. Underground drilling was just less than 200,000 feet. Drilling was mainly in and around the existing underground operations at SSX and Smith. Drifting in the West Dash area of the Smith mine encountered unexpected mineralization. Subsequent underground drilling returned intercepts as high as 65 feet grading 0.680 opt gold and 25 feet averaging 0.820 opt gold within a moderately inclined, north-south-trending tabular zone. Surface holes tested mineralization that extends eastward from the Dash pit. Seven of eight holes cut intercepts grading more than 0.150 opt gold, with the best

³ Lower plate and upper plate refer to the footwall and hanging wall, respectively, of the Roberts Mountains thrust fault. The lower plate is composed of predominantly carbonate rocks, which are more receptive to mineralization than upper-plate rocks, which are predominantly siliceous and non-calcareous.

result being 20 feet grading 0.551 opt gold. Surface holes were drilled to test the westward extent of mineralization from Zone 2 (Coulee Dike Trend) at Smith. Hole SH-1178A, drilled almost 2,000 feet west of the current underground mine activity, intersected 30 feet averaging 0.415 opt gold. Holes SH-1175A and SH-1177A, drilled between the workings and SH-1178A, had intercepts of 20 feet grading 0.241 opt gold and 30 feet averaging 0.238 opt gold, respectively, supporting some continuity to the westward extension of mineralization. Mineralization in the parallel west-northwest trending Zone 4 (Mahala Dike Trend) was extended westward by underground drilling that included an intercept of 30 feet grading 1.017 opt gold. In addition to extending known zones of mineralization, the aggressive exploration found new west-northwest trending zones of mineralization between the Smith and SSX mines. For example, in a parallel zone south of Zone 2, in the Mahala Creek drainage area, results were encouraging. Ten of fourteen holes had intercepts greater than 0.15 opt gold, the best being 35 feet grading 0.371 opt gold (hole MAH-344) and 60 feet averaging 0.336 opt gold (hole MAH-349). At SSX, 405 holes totaling 69,547 feet were drilled to convert resources to reserves. In addition, holes were drilled to extend the known resources at SSX. Highlights from Zone 5 included 35 feet grading 0.735 opt gold and 45 feet averaging 0.691 opt gold. Drilling at Starvation Canyon resulted in an increase in the probable reserve from 112,700 ounces of gold to 161,300 ounces. Minor drilling was also carried out on other targets throughout Yukon Nevada Gold's entire Jerritt Canyon property. (Yukon-Nevada Gold press releases, 8/7/2007, 9/24/2007, 11/27/2007, 1/8/2008, 1/14/2008, 3/3/2008; 43-101 Technical Report, April 16, 2008; Yukon-Nevada Gold website, www.yukon-nevadagold.com)

Ivanhoe District

Hollister. In February, Great Basin Gold Ltd. purchased Hecla Mining Company's 50% earn-in rights to the Hollister Development Block (HDB) project for a total of \$60 million, comprising \$45 million in cash and the remaining \$15 million in Great Basin Gold common stock, giving Great Basin Gold once again 100% ownership. During 2007, Great Basin Gold carried out an underground exploration and development program, with the objective of advancing the project through feasibility. Nearly 100 holes were drilled in 2007, mainly at 100-foot spacings, to fill in gaps from surface drilling and to define and test identified resource expansion areas within the Clementine and

Gwenivere vein systems. Drilling confirmed high grades and grade continuity and found new veins. Highlights include 3.8 feet of 11.36 opt gold and 81.13 opt silver (hole HDB-137, Gwenivere vein), 0.6 feet of 25.55 opt gold and 10.24 opt silver (hole HDB-158, Gwenivere vein) and 4.0 feet of 9.22 opt gold and 140.41 opt silver (hole HDB-175, Clementine vein). In addition, by mid-November, Great Basin Gold had drilled seven surface holes outside the HDB in the Hatter Zone and Hatter Graben. Intercepts included 7.6 feet of 0.188 opt gold that was associated with veinlets in the Hatter zone and five feet of 1.206 opt gold and 3.8 feet of 1.148 opt gold in the Hatter Graben, which were also associated with veinlets. In July of 2007, Great Basin released a feasibility report that indicated a net present value of \$122.9 million (5% discount). The report used a then-newly-estimated resource of 868,500 tons grading 1.01 opt gold and 4.3 opt silver, at a cut-off grade of 0.28 opt gold. It used a production rate of 400 tons of ore per day, recoveries of 95% gold and 90% silver, a start-up capital cost of \$52 million, an operating cost of \$175/ton, mining cost of \$42/ton, toll milling cost of \$29/ton. Later in June of 2008, based on drilling completed through January 2008, Great Basin Gold released a revised resource estimate. The total measured and indicated resource, using a cut-off grade of 0.28 opt gold, was increased to 1,469,000 tons grading 0.93 opt gold (1,360,000 ounces of gold) and 4.88 opt silver (7,173,000 ounces of silver). Great Basin Gold expects to put the mine into production and produce about 80,000 ounces of gold in 2008. (Great Basin Gold Ltd. press releases, 2/21/2007, 5/8/2007, 5/23/2007, 7/9/2007, 7/12/2007, 11/13/2007, 2/25/08, 6/18/2008; Great Basin Gold website, www.greatbasingold.com)

Ivanhoe Creek. Senator Minerals Inc. (joint venture with Kent Exploration) drilled five core holes totaling 2,594 feet that targeted high-grade epithermal gold-silver veins based on results of geophysical surveys and surface mapping of fault zones and silicification.. The property is located about three miles north of Great Basin Gold Ltd.'s underground Hollister deposit. The best intercept was 10 feet grading 7.64 opt silver. (Senator Minerals Inc. press release, 9/19/2007; Senator Minerals website, www.senatorinc.com)

Sheep Creek. Evolving Gold Corp. drilled two holes on their large Sheep Creek property, located north and west of Ivanhoe. The first hole (SCR-1), a vertical reverse circulation hole, was drilled to a depth of 1,480 feet before being abandoned due to

technical reasons. A twin hole, a vertical core hole (SCD-2), was collared near the terminated reverse circulation hole, but was also terminated at 1,230 feet. Both holes penetrated approximately 1,150 feet of unaltered Miocene volcanic rocks. Below the unaltered volcanic rocks, the holes encountered an approximately 65 foot-thick zone of intensely pyritized and silicified intermediate volcanic rocks, interpreted to represent the base of the Miocene volcanic sequence in the area. Below about the 1,215 foot depth, both SCR-1 and SCD-2 entered a sequence of intensely silicified, fractured and brecciated fine-grained sedimentary rocks, although specific intervals with volcanic-like textures were also observed. The bottom 770 feet of hole SCR-1 averaged 0.007 opt gold, with individual five-foot intervals ranging up to 0.044 opt gold. Hole SCD-2 returned gold assays as high as 0.14 opt gold over 3.3 feet in the highly pyritized basal volcanic sequence. Evolving Gold staked over 2,000 claims in 2007 as part of its Sheep Creek project, including claims staked in the name of President Quinton Hennigh. (Evolving Gold Corp. press releases, 1/23/2008, 2/28/2008; Evolving Gold website, [www. evolvinggold.com](http://www.evolvinggold.com); BLM LR 2000 database)

Squaw Creek. Bonaventure Enterprises Inc. (joint venture with US Gold Corp.) drilled three reverse circulation holes totaling 4,130 feet at its Squaw Creek project located just northwest of Hollister. Hole SC-0702 intersected the graben-bounding fault zone discovered in 2006. The fault zone in SC-0702 was 70 feet wide and graded 0.03 opt gold, including a 10 foot zone that assayed 0.07 opt gold. (Bonaventure Enterprises Inc. press release, 2/15/2008)

Jarbidge District

Jarbidge. Atna Resource Ltd. completed 10,380 feet of reverse circulation drilling and 2,419 feet of diamond core drilling in 24 holes in five target areas. Broad intervals of gold mineralization were intersected in the Long Hike vein structure, including 0.031 opt gold over 85 feet (hole AJLH-006, 985-1069 feet), 2.8 feet grading 0.221 opt gold (hole AJLH-006, 901.8-904.6 feet) and 60 feet averaging 0.045 opt gold (hole AJLH-022, 385-445 feet). Silver grading 1.79 opt in a five foot core interval was intersected in the Alta structure (hole AJALT-027, 60-65 feet). The Pick and Shovel, Starlight-Legitimate and Success-Bluster vein structures all returned anomalous gold values and widths. Atna terminated its principal option agreement in March, 2008, citing insufficient

encouragement to justify further exploration expenditures. (Atna Resources press release, 12/21/2007, 3/11/2008)

Owyhee Plateau

Owyhee Plateau. On the Owyhee Plateau, along the border between Humboldt and Elko Counties, 1,880 claims were staked in 2007 in the name of J.K. Cluer. They were located in townships T44N, R44-45E, T45N, R43-44E and T46N, R43-45E along the northwestern projection of the Carlin trend. According to the Nevada state geologic map, the claims were staked over the Banbury Formation, which consists of basalt, gravel, and tuffaceous sediments. (BLM LR2000 database)

Pequop District

Long Canyon. Fronteer Development Corp. (joint venture with AuEx Ventures Inc.) drilled 22 reverse circulation holes totaling over 11,000 feet and six core holes totaling 2,005 feet. Drilling in 2007 better defined the main zone of gold mineralization and extended it more than 500 feet to the northeast. Highlights of the drilling at the northeast end included 75 feet averaging 0.391 opt gold (hole LC063C 144-219 feet) within which 23 feet graded 0.879 opt, 107 feet averaging 0.092 opt gold (hole LC066C 102-209 feet) and 90 feet grading 0.102 opt gold (hole LC067C 204-294 feet). The main zone of gold mineralization at Long Canyon has now been defined by drilling to be almost 3,700 feet in length. It is oriented approximately N35°E and is open to the northeast 600 feet beyond the limits of the original gold-in-soil anomaly. In addition, the main zone remains open at depth and to the southeast and the southwest, where 1,600 feet of the gold-in-soil anomaly remains open. Importantly, the mineralization remains mainly within 300 feet of the surface and is oxidized. (AuEx Ventures Inc. press releases, 10/17/2007, 11/26/2007, 1/7/2008, 2/15/2008; AuEx website, www.auexventures.com)

West Pequop. Agnico-Eagle Mines Ltd. (joint venture with AuEx Ventures Inc.) completed a major drill program in 2007 at West Pequop, located west of the Long Canyon project. It completed 34 holes totaling over 27,000 feet of reverse circulation drilling and 6,300 feet of core drilling in the Section 34 and Mountain Top target areas. The Section 34 target area was extended to the southwest and remains open to the

north and east. Hole WN-073, which intersected 80 feet grading 0.169 opt gold (565-654 feet), was located about 150 feet east of a drill intercept in 2006 that graded 0.189 opt over 55 feet. Mineralization was extended to the northeast by hole WN095 (590-665), which intersected 75 feet grading 0.210 opt gold. In addition, 30 feet averaging 0.469 opt gold were intercepted in hole WN080 (110-140 feet). Drilling in the Section 34 target area remains open to the north, east and at depth. Gold mineralization drilled thus far is controlled by both high-angle structural zones and at least three favorable stratigraphic horizons in carbonates of the Cambrian Notch Peak Formation and Ordovician Pogonip Group. Hole WNC-101, the first hole drilled in the Mountain Top target area that is located over 4,000 feet southeast of Section 34, intersected 30 feet grading 0.280 opt gold (130-160 feet). It appears to be controlled by a series of high-angle faults that trend northeast and north-south hosted within the Pogonip Group. All mineralization drilled to date, including the new mineralization at Mountain Top, continues to appear oxidized. (AuEx Ventures Inc. press releases, 6/28/2007, 9/24/2007, 1/9/2008; AuEx website, www.auexventures.com).

Railroad District

Railroad. Royal Standard Minerals Inc. drilled five core holes within proposed pit margins for the north and main zones. It is now stressing the copper and molybdenum potential of the property. Results from the drilling extended copper and molybdenum mineralization about 935 feet south of the previous drilling activity, where drill intercepts of as much as 400 feet grading 0.432% copper and 245 feet averaging 0.0365% molybdenum were encountered just north of the Bald Mountain fault. Highlights of the 2007 drill program included 50 feet grading 0.24% copper and 196 feet averaging 0.0281% molybdenum in hole RR-07-02 and 60 feet averaging 0.38% copper and 120 feet grading 0.0297% molybdenum in hole RR-07-04. (Royal Standard Minerals Inc. press releases, 11/19/2007, 1/10/2008; Royal Standard website, www.royalstandardminerals.com)

Robinson Mountain District

Pony Creek. Grandview Gold Inc. drilled six holes totaling 4,911 feet mainly within an existing inferred resource of 1.42 million ounces of gold that was outlined mainly by Newmont Mining in the late 1980s and early 1990s. Highlights include 120 feet grading 0.064 opt gold (hole PC-07-16, 420-540 feet), 140 feet averaging 0.075 opt gold (hole PC-07-19, 365-505 feet, drilled northward from the same pad as PC-07-16), and 155 feet grading 0.039 opt gold (hole PC-07-20, 365-505 feet, drilled southward from the same pad as PC-07-16). The drilling supports Grandview's interpretation of a north-south structural control on mineralization in the inferred resource area. (Grandview Gold Inc. press releases, 9/26/2007, 10/10/2007, 11/1/2007, 11/8/2007; Grandview website, www.grandviewgold.com)

Pony Spur. Next to Grandview Gold Inc.'s Pony Creek property, Sage Gold Inc. began a small drilling program in October, 2007 that was to consist of four 900-foot core holes. No results were released. (Sage Gold Inc. press release, 10/16/2008; Sage Gold website, www.sagegoldinc.com)

Tuscarora District

Danny Boy. Grandcru Resources Corp. drilled two holes totaling approximately 3,000 feet. Results were released for the first hole, which collared in Tertiary volcanic rocks and encountered Paleozoic carbonaceous sedimentary rocks at a depth of 935 feet and bottomed in what was likely upper plate Vinini Formation. The highest gold assay was 0.002 opt gold and the bottom 147 feet of the hole had elevated trace elements. (Grandcru Resources Corp. press release 4/19/2007).

Union District

Garcia Flats. Christopher James Gold Corp. (joint venture with Harvest Gold Corp.) drilled three flooded reverse circulation holes totaling 5,385 feet. The holes passed through several hundred feet of pediment gravels before encountering altered Eocene volcanic rocks interbedded with limestone and epiclastic rocks. The best assay was five feet grading 0.002 opt gold. (Harvest Gold Corp. press release, 10/23/2007)

ESMERALDA COUNTY

Gilbert District

Monte Cristo. Gold Summit Corp. reportedly carried out a six-hole 6,000 foot reverse circulation drill program to test one of several epithermal vein targets in the Ohio Camp area. No results were released. (Gold Summit press release, 9/19/2007)

Lone Mountain District

Millers. Golden Predator Mines Inc. carried out a small drilling program. No results were released. (Golden Predator website, www.goldenpredator.com)

Rock Hill District

Redlich. Newcrest Mining Ltd. (leased from Miranda Gold Corp.) completed 2,376 feet of oriented core drilling in two holes. The holes were designed as offsets of drill hole R-73, a reverse circulation hole that intersected 55 feet grading 0.046 opt Au and 10 feet averaging 1.037 opt gold. No intercepts over 0.030 opt were encountered in the two core holes. In February of 2008, Newcrest terminated its agreement with Miranda Gold. Since March 2004 when Newcrest entered into the agreement with Miranda Gold, it spent \$1,735,687, mainly on a 61-hole reverse circulation drill program as well as the two core holes for a total footage of 40,568 ft. (Miranda Gold press releases, 10/15/2007, 2/20/2008)

Tokop District

Empress. Golden Oasis Exploration Corp. initiated an eight-hole, 3,000-foot core drilling program in October with the objective of testing the continuity of the Wonder vein system. Two of the core holes contained high-grade gold-silver intercepts. Hole E0702 intersected seven feet averaging 0.237 opt gold and 1.75 opt silver. Hole E0706 intersected five feet grading 0.793 opt gold and 0.46 opt silver. (Golden Oasis press release, 10/1/2007, 6/18/2008; Golden Oasis website, www.goldenoasis.ca)

EUREKA COUNTY

Antelope District

Afgan. Midway Gold Corp. drilled eight reverse circulation holes totaling 2,970 feet in December. Four holes were drilled around the existing Afgan resource and four holes on the Big Cyndi two miles to the north. The Afgan resource drilling was designed to test the deposit margins and extensions of higher grade gold zones along faults. Hole AF07-02, drilled beneath a previously untested jasperoid northwest of the resource, intercepted 60 feet grading 0.023 opt gold. Hole AF07-05, drilled to test for offset gold mineralization in a fault zone, intersected 85 feet averaging 0.039 opt gold. At Big Cyndi, hole BC07-04 intercepted a silicified fault zone that contained 25 feet grading 0.016 opt gold. (Midway Gold Corp. press release, 2/21/2008; Midway Gold website, www.midwaygold.com)

Gold Bar Complex. US Gold completed 21,150 feet of drilling in the Cottonwood and MacBeth target areas within its large Gold Bar Complex property. Cottonwood is located in the Roberts Mountains west of the Gold Bar satellite deposits along the Wall Fault, a high-angle fault that bounds a window of lower plate rocks. MacBeth is located in the Roberts Mountains, south of the Gold Bar satellite deposits, where two northeast-trending structural features are being targeted. (US Gold annual report filed with the U.S. Securities and Exchange Commission (Form 10-K); US Gold website, www.usgold.com)

Red Canyon. Romarco Minerals Inc. drilled eight reverse circulation holes (6,070 feet) at the end of 2007. Results included 50 feet grading 0.066 opt gold in hole ROM07-01 (15-65 feet) at the Ice prospect. The intercept in ROM07-01 is approximately 145 feet southwest of KR-001, a hole drilled by Kennecott in 2000 with 95 feet grading 0.117 opt gold (20-115 feet). Mineralization occurs in oxidized and silicified lower plate limestone, and is associated with elevated levels of arsenic, antimony, mercury and anomalous amounts of barite. None of the other holes that Romarco drilled had intercepts above 0.007 opt gold. Besides the Ice prospect, Romarco drilled the Gexa Knob and Fire targets as well. Romarco terminated its agreement with Miranda in March, 2008.

(Romarco Minerals Inc. press release, 1/15/2008; Miranda Gold press release, 3/4/2008)

Crescent Valley

Vasquir. CMQ Resources Inc. (joint venture with Mill Bay Ventures Inc.) drilled 11 flooded reverse circulation holes totaling 18,420 feet on their Vasquir project centered on Hot Springs Point a few miles east of the town of Crescent Valley. The holes were drilled on the Hot Springs North, Valmy Hill and Northwest Corridor target areas. The best assay was five feet grading 0.227 opt gold from 895 to 900 feet. Based on results through the 2007 drill program, CMQ resources decided not to further pursue the project. (CMQ Resources Inc. press release, 11/19/2008; CMQ Resources website, www.cmqresources.com)

Eureka District

Anchor. Golden Odyssey Mining Inc. drilled at least one reverse circulation hole to a depth of 970 feet at its Anchor gold project located just north of Devils Gate. The hole intersected black shale, siltstone and chert (Vinini Formation?) and felsic intrusive rocks (sills of the Jurassic Whistler Peak lacolith?). No assays were released. (Golden Odyssey Mining Inc. press release, 05/03/2007).

East Archimedes/Ruby Hill. Barrick Gold Corp. produced its first gold from the East Archimedes deposit in February, 2007 at a total reported cash cost between \$140 and \$170 per ounce. Exploration continued on the 426 Fault and Deep East Archimedes targets. (P. Dobak, Barrick Gold Corp., oral commun., December, 2007; Barrick Gold website, www.barrick.com)

Jewell Ridge. Greencastle Resources Ltd. drilled 17 reverse circulation holes totaling 8,865 feet. At the Hamburg target, three holes tested the extensions of gold mineralization in sanded dolomite along the Hamburg Dolomite-Dunderberg Shale contact. One hole intersected anomalous gold values over 75 feet. Two holes targeted carbonate replacement gold-silver-lead-zinc mineralization along a northeast-trending fault just south of the old Croesus mine to the north of the Hamburg area target. Results

were negative. Further to the east at the Lost Jewell prospect, three holes targeted stratigraphically controlled gold mineralization in the Goodwin Limestone, but returned no significant values. At the north end of the three kilometer-long silicified and brecciated Silica Ridge target near Windfall Canyon, three holes returned low gold values. Six holes were drilled at Magnet Ridge in the northwest corner of the claim block where gold occurs in strongly oxidized zones with silver, lead and zinc in Eldorado Dolomite. The best intercept was 20 feet grading 0.036 opt gold. (Greencastle Resources Ltd. press release, 8/31/2007).

Signal. In December Bravo Ventures Group Inc. began a seven-hole drill program for which no results were released. (Bravo Ventures press release, 12/10/2007, Bravo Ventures website, www.bravoventuregroup.com)

South Eureka. Stacatto Gold Resources Ltd. drilled six core holes totaling 5,525 feet to continue to define its gold resource south of the old Lookout Mountain pit. The holes encountered several intercepts that assayed 0.015 to 0.055 opt gold. (Staccato Gold Resources Ltd., press releases, 5/17/2007)

Lynn District

Carlin. Drilling by Newmont Mining Corp. focused on the Full House Anticline target near the Carlin underground mine, where it outlined an apparent extension of the main underground ore body. The target occurs in the hanging wall of the Bull Moose fault. (U.S. Securities and Exchange Commission Forms 8-K filed by Newmont, April 26, 2007; R. Reid, Newmont Mining Corp., oral commun., December, 2007; Newmont website, www.newmont.com)

Goldstrike. Deep drilling by Barrick Gold Corp. from its Banshee and Deep Post underground deposits continued to show high grades and continuity. Late in 2007, Barrick began work on an exploration drift to access the Deep North Post area. (P. Dobak, Barrick Gold Corp., oral commun., December, 2007; Barrick 2007 Annual and Quarterly reports; Barrick Gold website, www.barrick.com)

Leeville. Newmont Mining Corp. carried out a major underground infill drill program at Leeville with the primary focus of converting resources to reserves. Exploration focused on evaluating the upside underground potential of the Turf deposit, where drilling generated positive results. (U.S. Securities and Exchange Commission Forms 8-K filed by Newmont, April 26, 2007 and September 26, 2007; Newmont website, www.newmont.com)

Maggie Creek District

Gold Quarry. Newmont Mining Corp. carried out a major drill program at Gold Quarry. Drilling oxide targets east of the Gold Quarry pit demonstrated continuity of mineralization with intercepts ranging from 164 to 230 feet that contained 0.01 to 0.06 opt gold. (U.S. Securities and Exchange Commission Form 8-K filed by Newmont, April 26, 2007; Newmont website, www.newmont.com)

Mount Hope District

Mount Hope. General Moly, Inc. (formerly Idaho General Mines, Inc.) completed a bankable feasibility study on its Mount Hope porphyry molybdenum deposit. The proven and probable reserves are estimated to be 965,926,000 tons at 0.068% molybdenum, containing 11.31 billion pounds of molybdenum in an open pit mine. At a price of \$15/lb for molybdenum and a 10% discount rate, the net present value after taxes is \$1 billion dollars. The estimated net present value is sensitive to the price of molybdenum, and would drop to \$83 million at a price of \$10/lb and would increase to \$3.55 billion at a price of \$30/lb. The study estimates an \$852 million capital investment and a planned production cost of \$4.42/lb for the first five years when the average molybdenum grade would be 0.100%. General Moly expects to have all permits by the first half of 2009. In 2007, it was undertaking a number of baseline studies in preparation for an environmental impact statement, a draft of which should be released in the first quarter of 2009. Also in 2007, the company acquired full water rights to 7,000 gpm, mainly from Kobeh Valley, that will be used in the planned flotation process. General Moly made significant process in financing the construction of the mine. ArcelorMittal, the world's largest steel maker, made a private placement that generated \$70 million in proceeds. General Moly also entered into a molybdenum supply agreement with ArcelorMittal,

whereby General Moly will supply ArcelorMittal 6.5 million pounds of molybdenum per year. The agreement provides for a floor price significantly higher than estimated cash costs of production and includes a variable discount to spot molybdenum prices above the floor price. Also, in February of 2008, General Moly took on POSCO as a joint venture partner. POSCO will make three payments totaling \$170 million, with the final \$70 million being made upon receipt of necessary permits required to construct the mine. POSCO will have rights to 20% of the production and will be responsible for 20% of the project capital and operating expenses. General Moly expects the mine to be constructed and production begun by the second half of 2010. In addition, General Moly drilled five holes (1,400 feet of reverse circulation pilot hole drilling and 5,100 feet of core) in the first half of 2007 to confirm the high-grade core of the deposit. Molybdenum grades between 0.145% and 0.118% over thicknesses ranging from 635 and 905 feet were intersected. Another 14 holes were planned beginning in September, 2007, but no results have been released. (General Moly press releases, 6/29/2007, 8/30/2007, 9/11/2007, 11/28/2007, 1/2/2008, 1/8/2008, 2/19/2008; General Moly website, www.generalmoly.com)

Northern Simpson Park Mountains

JDS. A reverse circulation drill rig was mobilized to Golden Odyssey Mining Inc.'s JDS gold project in May, 2007 for a 6,000-foot drilling program. No results were released. (Golden Odyssey Mining Inc. press release, 5/3/2007)

Patty (Indian Ranch). Over \$600,000 was expended on the property in 2007 (joint venture between Barrick Gold Corp. and US Gold Corp.). No drill results were released. (US Gold annual report filed with the U.S. Securities and Exchange Commission (Form 10-K); US Gold website, www.usgold.com)

Red Hill. In late 2007, Barrick Gold Corp. (joint venture with Miranda Gold Corp.) completed 11,765 feet of reverse circulation drilling in six vertical holes. Four holes were drilled to offset hole BRH-013, which in 2006 intercepted 80 feet grading 0.146 opt from 1,920 to 2,000 feet depth at the West Pediment prospect. Hole BRH-016 was drilled 650 ft to the north of hole BRH-013, and BRH-021 was drilled 720 feet to the northwest of hole BRH-013. The holes intersected intervals of variably decalcified, silicified and

weakly oxidized lower plate limestone and sulfidized igneous dikes similar to those intersected in the BRH-013 gold-bearing interval. Gold mineralization was limited to 10 feet grading 0.081 opt gold from 2,125 to 2,135 feet in BRH-021. The other two holes at West Pediment ended prematurely in limestone voids before testing their intended targets. At the East Pediment prospect two drill holes, BRH-023 and BRH-024, tested pediment-covered targets east of a series of historic antimony prospects. The holes were located based on prospect pit exposures of strong decalcification, silicification, antimony mineralization and anomalous gold mineralization in lower plate limestone; gravity data that identified structural features beneath shallow pediment cover; and projected splays of the east-northeast-trending Long fault. The holes intersected a thin veneer of alluvium, upper plate siliciclastic rocks, and a fault, which had removed the targeted lower plate limestone. Anomalous gold was restricted to 5 to 10 foot-thick zones. (Miranda Gold Corp. press release, 6/26/2008; Miranda Gold website, www.mirandagold.com)

Tonkin Springs. US Gold Corp. drilled 147 holes in 2007, totaling 138,760 feet, of which 72,919 feet were reverse circulation drilling and 65,844 feet were core drilling. The objectives of its 2007 program were to identify higher grade structures below the existing open pits and other known mineralization; to expand the known mineralization in the Mine Corridor area; and to test new targets on the property. Hole T-148, drilled on the east side of an existing resource in the Southern Area, intersected 55 feet grading 0.147 opt gold (306-361 feet). Hole T-129 intersected 54 feet averaging 0.149 opt gold that included 1.7 feet grading 1.175 opt gold, which was the highest grade mineralization encountered since US Gold began drilling in 2006. This hole was drilled between known resource areas in the Southern Area. Drilling at North Rooster intersected 296.5 feet averaging 0.028 opt gold (hole T-87, 362.5-659 feet), which was 300 feet north of a 2006 hole that intersected 145 feet grading 0.039 opt gold. Based on the drilling completed in the Mine Corridor through 2008, US Gold released a new resource estimate in May, 2008 that increased the total measured, indicated and inferred resource by 24% to 1,758,000 ounces of gold at a grade of 0.039 opt. The primary host rock for the known mineralization is now interpreted to be the Cambrian-Ordovician Hales Formation, which consists of sandy limestone, siltstone, shale, and greenstone in the Mine Corridor area. These rocks are in apparent structural contact with rocks of the Ordovician Vinini Formation, Devonian Slaven Chert, Devonian

McColley Canyon Formation and Devonian Devils Gate Limestone. Gold mineralization is found in all of the lithologies of the Hales, Slaven Chert and McColley Canyon Formations. Only spotty gold has been found in the other units. US Gold also drilled five holes in the Tweed area, an area northwest of Rooster that is covered by Tertiary volcanic rocks. The five holes intersected hydrothermal alteration and anomalous trace elements. Nine holes, drilled in the Fye Canyon area at the northwest end of the property, did not intercept any significant gold values, but did encounter anomalous trace elements. The nine holes encountered upper plate rocks consisting of rubble zones of Vinini Formation and/or Slaven Chert formations, as well as local dikes. A single hole was drilled at Twin Peaks at the very north end of the property, which, along with holes drilled by Agnico-Eagle in the past, encountered gold mineralization in lower plate rocks. (US Gold press releases, 4/10/2007, 6/12/2007, 10/4/2007, 5/20/2008; US Gold annual report filed with the U.S. Securities and Exchange Commission (Form 10-K); US Gold website, www.usgold.com)

Roberts District

Keystone. Two Carlin-like gold targets and a base metal target were drilled by US Gold in 2007. Assay results from the Carlin-like targets showed little gold but exhibit strongly anomalous trace elements. Assay results from the base metal target showed only low grades of silver, zinc, copper and lead. (US Gold annual report filed with the U.S. Securities and Exchange Commission (Form 10-K); US Gold website, www.usgold.com)

HUMBOLDT COUNTY

Awakening District

Sleeper. X-Cal Resources Ltd. drilled at least 113 holes, totaling 71,406 feet, in 2007. Drilling was mainly concentrated in known areas of gold mineralization, including the Facilities and West Wood areas. Drill intercepts from the Facilities area include 20 feet grading 0.949 opt gold (hole XR-07-25, 515-535 feet), 10 feet averaging 1.548 opt gold (hole XR-07-36, 445-455 feet), 102 feet grading 0.030 opt gold (hole XC-07-09, 150-252 feet) and 130 feet averaging 0.025 opt gold (hole XR-07-106, 390-520 feet). Drill intercepts from the West Wood area include 35 feet grading 0.133 opt gold (hole XW-

07-71, 875-910 feet) and 30 feet averaging 0.121 opt gold (hole XW-07-73, 560-590 feet). In addition, X-Cal drilled 40 sonic holes on the old heap leaches in order to assess the potential for re-processing. (X-Cal Resources Ltd. press releases, 3/8/2007, 4/10/2007, 4/24/2007, 7/10/2007, 9/17/2007, 11/13/2007, 12/5/2007).

Battle Mountain District

Marigold. Goldcorp Inc. (joint venture with Barrick Gold Corp.) carried out a major drill program, mainly aimed at converting resources to reserves. Exploration on the property focused on expansion of the Basalt open pit, evaluation of the Trout Creek fault that hosts the Marigold orebodies, and evaluation of on-trend structural targets in gravel-covered pediment at the north end of the property. (Goldcorp 2007 Annual report, Goldcorp website, www.goldcorp.com)

Buffalo Mountain District

Converse. Metallic Ventures Gold Inc. drilled 60 reverse circulation holes totaling 44,032 feet and seven core holes totaling 7,332 feet. The reverse circulation holes defined the periphery of the deposit; identified suitable areas for leach pads, dumps, and infrastructure; and explored north-south structural trends, placer gold in the alluvium, and the deposit at depth. Highlights of the program included assay results for drill holes NK-204 that had five feet grading 0.414 opt gold and NK-190, which had five feet grading 0.299 opt gold. These are two of the higher grade intercepts drilled at the Converse Project, and both drill holes lie several hundred feet beyond the outermost boundary of the current resource model. The core holes were drilled for metallurgical and geotechnical purpose and to help confirm the existing resource estimate. The core drilling showed the current block model is open to the west and at depth and demonstrated potential for structurally controlled higher grade gold-silver-copper mineralization in the deposits. Intercepts included 473 feet grading 0.034 opt gold (oxidized), which included five feet grading 1.304 opt gold. Several holes in both the core and reverse circulation holes had intercepts in alluvium that assayed greater than 0.01 opt gold. This gold is interpreted to be alluvial in origin, and derived from the upper portion of the resource, which is hosted by bedrock. In June, Newmont Mining Corp. announced it would not exercise its joint venture option, and Metallic Ventures gained

100% of the property. (Metallic Ventures Gold Inc. press releases, 1/23/2007, 5/14/2007, 6/4/2007, 10/24/2007; Metallic Ventures website, www.metallicventuresgold.com)

Stonehouse. Barrick Gold Corp. reportedly carried out a small drilling program on its Stonehouse property north of the Lone Tree mine. (P. Dobak, Barrick Gold Corp., oral commun., December, 2007)

Disaster District

Kings Valley. Western Energy Development Corp. (wholly owned subsidiary of Western Uranium Corp.) continued to explore for uranium at its Kings Valley project along the west side of the McDermitt caldera in northern Humboldt County. In February it released an inferred resource of 2,978,000 tons of 0.081% U_3O_8 . The resource occurs in three areas – the North and South zones, which were originally discovered and outlined by Chevron between 1975 and 1980, and the Moonlight Mine area, previously explored by the Anaconda Company in the late 1970s. Potential exists in the area located between the three resource areas, which are aligned north-south along the caldera margin. The North zone is three kilometers north of the South zone, whereas the Moonlight Mine is about one mile south of the South Zone. The uranium mineralization is localized in fault breccias, hydrothermal breccias, and along brecciated margins of rhyolite dikes and domes. Silicification and pyrite are commonly associated with the uranium. Also, in early 2007, Western Energy staked an additional 1,982 claims, which brought its total number of claims in the project area to 3,900. Following the release of the resource estimate, Western Uranium Corp. announced a strategic alliance agreement with Cameco Corp., the world's largest uranium producer, whereby Cameco acquired 10% of Western Uranium Corp. through a non-brokered private placement that amounted to approximately \$20.1 million. The agreement provides Cameco the right to earn a 70% interest in Kings Valley or other projects of Western Uranium Corp. upon the definition of 15 million pounds of U_3O_8 beyond its currently defined resources. In addition, Western Energy drilled 30 reverse circulation and four core holes. The reverse circulation holes included infill drilling and drilling for extensions in the three main zones. The best intercept was 70 feet grading 0.253% U_3O_8 , which was drilled near the Moonlight Mine workings (Hole KV-22, 285-355 feet). Additional

drilling in the Moonlight Mine area targeted polymetallic intercepts encountered in 2006 in Hole KV-19 that included 35 feet averaging 0.037 opt gold, 45 feet grading 1.129 opt silver and 65 feet averaging 0.021% molybdenum. Hole KV-25 intersected 105 feet grading 0.015 opt gold (350-455 feet). Hole KV-28 drilled in the South Zone encountered gold values between 0.003 and 0.015 opt, and elevated mercury, arsenic, and molybdenum in addition to uranium. Results suggest the juxtaposition of hypogene uranium and epithermal gold mineralization. The four core holes were drilled along the range front west of the Moonlight Mine area to test a reported porphyry molybdenum system identified by Anaconda. The target is supported by a strong induced polarization geophysical anomaly. The holes did not intersect porphyry mineralization but reportedly encountered granodiorite, propylitic alteration, and advanced argillic alteration with 3-5% pyrite.

Lastly, Western Uranium formed a wholly owned subsidiary company called Newco, which will have the right to explore for, develop, and mine potential lithium resources on the Kings Valley property. In 1979, the U.S. Geological Survey released information that the moat sediments of the McDermitt caldera are high in lithium, and in the early 1980s, Chevron defined over 42 billion lbs of high-lithium clays, including significant amounts of hectorite, a lithium-rich specialty clay. (Western Uranium Development Corp. press releases, 2/22/2007, 2/27/2007, 5/2/2007, 5/8/2007, 5/23/2007, 7/12/2007, 7/30/2007, 8/29/2007, 9/11/2007, 11/28/2007; Western Uranium website, www.westernuraniumcorp.com; BLM LR2000 database)

Dutch Flat District

Dutch Flat. Columbus Gold Corp. (joint venture with Piedmont Mining Co.) drilled 24 angled, reverse circulation holes to depths of 245 to 820 feet for a total of 10,280 feet. The two best intercepts were 145 feet grading 0.021 opt gold and 160 feet averaging 0.011 opt gold. Mineralization at Dutch Flat is concentrated in swarms of narrow quartz veins. (Piedmont Mining press release, 1/18/2008)

Opalite District

Cordero. Gold Canyon Resources Inc. drilled 10 holes and released a new resource estimate for its Cordero Gallium Project. The measured and indicated resource is estimated to be 16,502,535 tons grading 47.7 ppm gallium. (Gold Canyon press releases, 8/20/2007, 2/11/2008; Gold Canyon website, www.goldcanyon.ca)

Potosi District

Pinson. In August of 2007, Barrick Gold Corp. began a major program aimed at earning back a 70% interest in the property. The project is a joint venture with Atna Resources Ltd., which currently controls 70% of the project, with Barrick currently controlling 30%. Barrick needs to spend \$30 million by April, 2009 to earn back a 70% operating interest in the project. A total of 26,899 feet of drilling was completed by the end of November 2007, including 20,364 feet of reverse circulation and 6,535 feet of core drilling. Barrick focused its drilling in four areas: 1) infill drilling in the Range Front/Ogee/CX West zones, 2) infill drilling in the CX zone, 3) exploration drilling in the HPR-104 area, and 4) exploration drilling in the Summer Camp area near the northern boundary of the property adjacent to the Turquoise Ridge Joint Venture. Early results include a high-grade intersection confirming the grade in the Ogee zone. Hole BRFC-019 intercepted 30 feet grading 0.352 opt gold. A high-grade intercept was encountered in the hanging wall of the Range Front zone, where an interval of 90 feet grading 0.284 opt gold, included 15 feet averaging 0.867 opt gold. The best intercepts at CX West were 55 feet grading 0.299 opt gold and 20 feet averaging 0.599 opt gold. Barrick also began to dewater the underground workings in anticipation of a major underground drill program in 2008. (Atna Resources Ltd. press release, 1/8/2008; Atna website, www.atna.com)

Turquoise Ridge. Barrick Gold Corp. (joint venture, 75% Barrick, 25% Newmont Mining Corp.) began underground development and drilling at the Turquoise Ridge deposit from the High Grade Bullion zone northward. Results were very encouraging. Surface drilling also occurred between the Getchell and Turquoise Ridge deposits and elsewhere on the property. (P. Dobak, Barrick Gold Corp., oral commun., December, 2007; Barrick 2007 Annual and Quarterly reports, Barrick website, www.barrick.com)

Twin Creeks. Newmont Mining Corp. carried out a small drill program, focused mainly on the east side of the Megapit. A hole located 1000 feet east of the pit intersected 200 feet grading 0.12 opt gold. (R. Reid, Newmont Mining Corp., oral commun., December, 2007)

Sulphur District

Hycroft. In 2007, Allied Nevada Gold Corp. started a project to reopen the Hycroft gold mine with production planned for early 2009. As part of its reactivation project, Allied Nevada began a major drilling program in August with 47 reverse circulation holes and 14 core holes totaling about 61,000 feet completed in 2007. The drill program was designed to confirm the oxide gold resource in the Brimstone area and to test potentially higher grade sulfide mineralization below the known oxide resources. The program was also designed to define the distribution of silver, which provides significant value to the drill hole intercepts, but was not always assayed in historic drill holes. Highlights included hole H07D-3086, which intersected a previously undefined zone of gold-silver mineralization south of the Central pit. The hole intercepted 56.5 feet grading 0.085 opt gold and 6.3 opt silver from 445 to 501.5 feet in depth. (Allied Nevada Gold Corp. press releases, 8/29/2008, 9/13/2008, 10/1/2008, 12/5/2008, 1/16/2008, 2/4/2008; Allied Nevada website, www.alliednevada.com)

Tenmile District

Sandman. In June, NewWest Gold Corp. released a resource estimate for the Sandman project, which includes the Southeast Pediment, North Hill, Silica Ridge and Abel Knoll deposits. The total measured and indicated resource is 8,033,000 tons of 0.034 opt gold (271,900 ounces of gold). An additional inferred resource of 1,418,000 tons of 0.027 opt gold (38,000 ounces of gold) is estimated. Mineralization is oxidized. Thirty holes totaling about 23,000 feet were drilled in 2007, focused largely on the Abel Knoll deposit. Highlights include 435 feet grading 0.046 opt gold in hole AK07-37, 75 feet averaging 0.053 opt gold, including 30 feet grading 0.10 opt gold in hole AK07-34, and 50 feet averaging 0.098 opt gold in hole AK07-41. In 2007, NewWest Gold was acquired by Fronteer Development Corp. In February of 2008, a Letter of Intent was signed with Newmont Mining Corp. to rapidly advance the Sandman project decision within 36 months. (NewWest Corp. press releases, 3/24/2007, 6/4/2007; NewWest

website, www.newwestgold.com; Fronteer Development Corp., press releases, 7/27/2007, 11/6/2007, 2/6/2008; Fronteer website, www.fronteergroup.com)

Virgin Valley District

Painted Hills. International Tower Hill Mines Ltd. (joint venture with Redstar Gold Corp.) drilled four core holes totaling 6,076 feet. The holes tested 1,400 feet of strike along a high-level epithermal vein system, which has been traced on the surface and by geophysics for almost one mile. All holes intersected multiple steeply-dipping zones of strong pyritic silicification and argillic alteration containing a stockwork of sulfidic chalcedony veins. The drilling has identified an alteration zone that is at least 660 feet wide. All holes intersected anomalous gold, including a number of 10-30 foot-wide intervals with gold assays in the range of 0.003 to 0.006 opt gold. Drilling did not intersect a boiling zone that is interpreted to lie below the level of the current drilling. (Redstar Gold press release, 9/5/2007; Redstar website, www.redstargold.com)

Winnemucca District

Winnemucca Mountain. Yamana Gold Inc. (joint venture with Evolving Gold Corp.) reportedly started a five-hole 3,000 foot reverse circulation drill program in November. Evolving Gold reported in January of 2008 that Yamana terminated its earn-in agreement. No results have been released from the 2007 drilling. (Evolving Gold press releases, 11/15/2007, 1/10/2008)

LANDER COUNTY

Aspen District

Highland. Newcrest Mining Ltd. (joint venture with Fortune River) drilled four core holes in late 2006/early 2007. Multiple, narrow veins were intersected, with the best gold intercept being 0.8 feet grading 0.466 opt gold and the best silver intercept being 0.7 feet averaging 9.0 opt silver. Several vein zones ranging up 5.5 feet returned grades of 0.009 to 0.07 opt gold and up to 1.45 opt silver. (Fortune River Resources Corp. press release, 10/31/2008; Fortune River website, www.fortuneriver.ca)

Bateman Canyon District

Slaven Canyon. US Gold drilled two holes. No results were released. (US Gold annual report filed with the U.S. Securities and Exchange Commission (Form 10-K); US Gold website, www.usgold.com)

Battle Mountain District

Independence Mine. General Metals Corp. drilled 32 reverse circulation holes totaling 10,475 feet on its Independence project located just south of Newmont Mining Corp.'s Phoenix deposit. The holes were drilled on the Independence Shallow Target, which lies completely south of the Canyon fault. The holes were drilled about 500 feet south of the old workings. Results appear to be confirming early estimates of mineralized material thought to contain 235,000 ounces of gold and 2,500,000 ounces of silver. (General Metals Corp. press releases, 11/27/2007, 11/29/2007, 1/2/2008, 1/8/2008, 1/14/2008, 2/21/2008, 2/25/2008, General Metals website, www.generalmetalscorporation.com)

Lewis. Madison Minerals Inc. (joint venture with Great American Minerals Inc.) drilled 10 core holes totaling 7,556 feet and 34 reverse circulation holes totaling 24,084 feet at their Lewis project located immediately to the north and west of Newmont Mining Corp.'s Phoenix gold-copper mine. All the holes were drilled along the Virgin fault zone. The core holes were drilled mainly to confirm previous results from reverse circulation drill holes and to test the geologic model. The 2007 drill results compare favorably with previously reported styles and grades of mineralization, including steeply dipping zones of higher gold grades and sub-horizontal zones of lower grade hosted by favorable stratigraphic units. The best intercept from the core drilling was 69 feet grading 0.202 opt gold. Step-out reverse circulation drilling expanded the Virgin zone more than 300 feet northward to a total of 2,000 feet and 165 feet down dip to a total of over 800 feet. Highlights of the step-out drilling include 20 feet grading 0.312 opt gold and 45 feet averaging 0.145 opt gold. The Virgin zone remains open along strike and down-dip. (Madison Minerals Inc. press releases, 12/13/2007; 3/26/2008; Madison website, www.madisonminerals.com)

Phoenix. Newmont Mining Corp. carried out a major in-fill drill program at its Phoenix gold-copper mine, where over 150 holes were drilled. It also drilled exploration targets in and around Phoenix, including deep targets along north-south faults on the west side of the old Fortitude open pit. (Newmont 2007 Annual Report; R. Reid, Newmont Mining Corp., oral commun., December, 2007; Newmont website, www.newmont.com)

Beowawe District

Beowawe. Atna Resources Ltd. drilled six reverse circulation holes totaling 6,205 feet, in order to test for gold mineralization in epithermal, volcanic-hosted quartz veins and associated geophysical anomalies beneath alluvial covered areas in the Northern Nevada Rift. Strong silicification, as well as argillic and propylitic alteration were encountered in all the holes. Several holes contained narrow (<20-foot wide) zones of quartz-chalcedony veining and associated pyrite. The best intercept was five feet grading 0.038 opt gold. (Atna Resources Ltd. press release, 6/6/2007)

Buffalo Valley District

Buffalo Valley. Newmont Mining Corp. (joint venture with Fairmile Goldtech Inc.) carried out a drill program and continued to outline encouraging oxide mineralization. (U.S. Securities and Exchange Commission Forms 8-K filed by Newmont, April 26, 2007; R. Reid, Newmont Mining Corp., oral commun., December, 2007).

Bullion District

Fire Creek. Klondex drilled 42 holes totaling 60,517 feet in 2007, which included both reverse circulation and core drilling. Drilling mainly focused on the resource area known as the Main Zone. Drilling extended the Main Zone some 650 feet to the south and 1000 feet to the north. Hole FC0747, the southernmost drilled thus far, intersected eight feet grading 1.24 opt gold and 15.7 opt silver. Drill hole FC0724 detected the Main Zone about 1,000 feet to the north of previous drilling by intersecting 30 feet averaging 0.51 opt gold that included 1.10 opt gold over 10 feet. Thirteen holes were drilled in 2007 to investigate gaps in the Main Zone, which had not been tested in previous drill programs. Intercepts from these holes, which included 2.6 feet grading 8.32 opt (hole FC0702) opt

gold and five feet averaging 1.24 opt gold (hole FC0709), generally met or exceeded expectations within the context of the previous drilling. Drilling also tested induced polarization geophysical targets outside the known mineralized corridors, resulting in the discovery of a new mineralized zone. The Northeast Zone, which is about 2,000 feet east of the Main Zone, was discovered by hole FC0748, which intersected five feet grading 1.83 opt gold. In 2007, Klondex also began the process of amending its Plan of Operations to include about 10,000 feet of underground workings to allow access to the Main Zone on two levels. It appointed Small Mine Development L.L.C. as its mining contractor for the underground exploration and development. Final permits are expected in 2008. (Klondex press releases, 3/2/2007, 3/30/2007, 7/4/2007, 9/14/2007, 10/19/2007, 11/26/2007, 1/17/2008, 3/19/2008; Klondex website, www.klondexmines.com)

Gold Acres Window. Barrick Gold Corp. carried out a major drilling program in the Gold Acres window near the Pipeline open pit, but no results were released. (P. Dobak, Barrick Gold Corp., oral commun., December, 2007; Barrick website, www.barrick.com)

Robertson. Coral Gold Resources Ltd. drilled two deep holes. Hole TV0701 was collared in the northwest corner of the property and was drilled vertically to a depth of 2,990 feet, but failed to intersect lower plate rocks. The hole encountered several narrow low-grade gold intercepts that were strongly anomalous in arsenic and antimony. The second hole, TV07-2, was also collared in the northwest corner of the property and was drilled vertically to a depth of 3,450 feet. The hole intersected strongly altered limestone of the lower plate at a depth of 3,080 feet in the footwall of a dike-filled fault. The upper 200 feet of the lower plate intercept locally returned anomalous gold values, accompanied by anomalous values of arsenic, antimony and thallium. Intercepts included 10 feet grading 0.064 opt gold and 20 feet averaging 0.042 opt gold. In December Coral released an updated inferred resource based on the drilling it completed in 2006. The total inferred resource is 91,284,000 tons of 0.025 opt gold (2,316,728 ounces of gold). (Coral Gold press releases 10/5/2007, 12/13/2007)

Cortez District

Cortez Hills/Cortez Corridor. Barrick Gold Corp. carried out another major drilling program in 2007 in and around the Cortez lower plate window. Exploration drilling at Cortez Hills upgraded the Lower Zone resource to the inferred category. Drilling farther to the south extended the deposit by at least 2,600 feet. By the end of 2007, directional drilling was utilized to test the southern extension beyond the Silver fault, and in several cases encountered mineralization. The zone is still open to the south. Underground development on the decline to access the deep parts of Cortez Hills totaled nearly 16,000 feet at the end of 2007. Advanced engineering and procurement activities are more than 80% complete. Barrick spent \$88 million on open-pit mining equipment and engineering for infrastructure at Cortez Hills. The Record of Decision allowing construction to begin on Cortez Hills is expected in the second half of 2008, to be followed by a 15-month construction period. In February, 2008, Barrick purchased Kennecott Minerals' 40% share in the entire Cortez property for \$1.695 billion in cash. (P. Dobak, Barrick Gold Corp., oral commun., December, 2007; Barrick 2007 Annual and Quarterly reports, Barrick website, www.barrick.com)

McCoy District

Hits. US Gold drilled one hole at its Hits projects (formerly known as Timber Creek). No results were released. (US Gold annual report filed with the U.S. Securities and Exchange Commission (Form 10-K); US Gold website, www.usgold.com)

Cove. Following up on encouraging results in 2006, Victoria completed two deep (>2,000 feet) core holes northwest of the old Cove open-pit mine. Victoria's three-hole program in 2006 successfully intercepted a structural intersection zone projected at depth to intersect favorable limestone of the Triassic Favret Formation. Hole NW-4 , drilled in 2007, was designed to cut the intersection zone, but reportedly deviated approximately 146 feet west and about 100 feet below the high grade zone intersected by hole NW-1 in 2006, referred to as the Helen zone. The best mineralized intercept in hole NW-4 was 67.5 feet grading 0.18 opt gold. Hole NW-5 hit 203 feet averaging 0.367 opt gold 225 feet down plunge of the Helen zone. The high-grade zone is located 2,000

feet northwest and roughly the same elevation as the bottom of the mined Cove open pit. (Victoria Resources press releases, 5/30/2007, 12/11/2007)

Mountain Springs District

Red Rock. Centerra Gold Inc. (joint venture with Luna Gold Corp.) drilled at least two holes. Hole RRC07-08C, which was a core tail drilled below hole RRC06-08, failed to reach the lower plate. Reverse circulation hole RRC07-10 intercepted 40 feet grading 0.009 opt gold starting at 1,400 feet and consisting of sheared upper siltstone and chert within the Roberts Mountains thrust zone, immediately overlying lower plate, decalcified Roberts Mountains Formation. In January of 2008, Centerra returned the property to Luna Gold. (Luna Gold press releases, 11/17/2007, 1/25/2008; Luna Gold website, www.lunagold.com)

Toiyabe Mine Area

Toiyabe. Golden Oasis Exploration Corp. drilled 43 angled reverse circulation and core holes totaling 16,417 feet. Drilling has thus far defined a 750 feet by 300 feet zone of greater than 0.015 opt gold associated with the Courtney A fault and a 600 feet by 200 feet zone associated with the Courtney B fault. The Courtney faults are truncated by a major northwest-trending, high-angle fault, referred to as the West Graben 1 fault. The core drilling encountered high grades along the Courtney A fault, especially hole T-706-C, which intersected 10 feet grading 0.32 opt gold (180-190 feet) and 10 feet averaging 0.777 opt gold (235-245 feet). The gold associated with the Courtney faults occurs in 45°-dipping zones within upper plate siliceous rocks. In 2008, Golden Oasis plans to test the down-dip extensions of these zones, which they believe will intersect in lower plate rocks at depths 600 to 1000 feet. (Golden Oasis press releases, 7/17/2007, 10/30/2007, 1/21/2008; Golden Oasis website, www.goldenoasis.ca)

LYON COUNTY

Como District

Hercules. American Goldfields Inc. drilled at least six holes in 2007. No results were released. (American Goldfields Inc. press release, 11/27/2008; American Goldfields website, www.americangoldfields.com)

Wilson District

Pine Grove. Romarco Minerals Inc. (joint venture with Carlin Gold Corp.) drilled three core holes totaling 4,534 feet on the east side of its Pine Grove project. Hole PG-36C intersected 195 feet averaging 0.032 opt gold that included five feet grading 0.609 opt gold in a silica breccia lens in a rhyolitic lava flow. Assays from hole PG-36C confirm two distinct disseminated gold mineralized breccia zones in two stacked rhyolitic lava flows. The final two holes, PG-37C and PG-38C, were typified by narrower zones of gold mineralization in altered rhyolite. The best intercept was six feet grading 0.175 opt gold in PG-37C. (Romarco Minerals Inc. press releases, 7/25/2007, 1/3/2008)

Yerington District

Ann Mason. Pacific Magnesium Corp. drilled six core holes at the Ann Mason deposit in 2007. Results from four of the holes have been released. Hole Ann07004, drilled in the Northwest zone toward the Ann Mason deposit intersected 2,190 feet grading 0.34% copper. Hole Ann07005 drilled in the Northwest zone intercepted 260 feet averaging 0.41% copper. Hole Ann07006, drilled in the Northwest zone away from the Ann Mason deposit, encountered 810 feet grading 0.34% copper. Hole Ann07007 drilled east of Ann Mason intercepted 310 feet averaging 0.31% copper. Three reverse circulation holes were drilled at Blue Hills target located about a mile west of the Ann Mason deposit. The best intercept was 250 feet grading 0.1% copper. (Pacific Magnesium press releases, 3/29/07, 11/19/07, 12/5/07, 1/15/08, 2/25/08, 4/7/08, 4/14/08; Pacific Magnesium website, www.pacmag.com.au)

MacArthur. In May 2007 Quaterra Resources Inc. received approval from a U.S. bankruptcy court to acquire all the assets of Arimetco, which includes the old Yerington mine area and the MacArthur resource area. Quaterra is currently conducting due diligence and may terminate the transaction at any time if it is dissatisfied with the condition of the property or fails to obtain requested environmental clearances for past mining-related activities. The MacArthur copper oxide deposits, based on shallow drilling performed by Anaconda between 1971 and 1972, contain a historic resource of 29 million tons grading 0.28% copper, including 13 million tons of greater than 0.4% copper. Quaterra drilled 44 core holes and 42 reverse circulation holes, totaling 28,900 feet, in order to confirm and expand that resource. The drilling delineated mixed oxide-chalcocite mineralization north of the MacArthur open pit. The mineralization has been traced for nearly 5,000 feet in an east-west direction. Based on holes drilled on 500 foot centers, the zone is currently up to 1,500 feet wide and averages over 100 feet thick. The best intercept from this zone was 180 feet averaging 0.91% copper, starting at a depth of 270 feet. Additional intercepts of note from this zone include 115 feet grading 0.3% copper starting at a depth of 195 feet, 25 feet averaging 1.25% copper beginning at 340 feet, and 95 feet grading 0.57% copper beginning at 305 feet. These three intercepts are from three holes that are located along the northernmost limit of the drilling; mineralization is open to the northwest. A few historic Anaconda drill holes suggest this zone may connect to the south with mineralization in and adjacent to the MacArthur open pit. In addition, a new zone of predominantly chalcocite mineralization, which was not part of Anaconda's original resource estimate, was discovered 20 to 70 feet below the existing MacArthur oxide copper deposit. It remains open both to the north and west where it may connect with the mineralization to the north, described above. The best intercept from this zone was 78 feet grading 0.78% copper, beginning at a depth of 136 feet. Mineralization was also intersected in holes drilled 1,200 to 1,700 feet east of the open pit. Furthermore, a porphyry copper target was identified in the Gallagher area west of the open pit below a large area of limonite-bearing sericitic alteration. (Quaterra Resources Inc. press releases, 5/1/2007, 10/9/2007, 1/31/2008; Quaterra website, www.quaterraresources.com)

Pumpkin Hollow. Nevada Copper Corp. completed a \$7 million development program at its Pumpkin Hollow copper project in 2007, which included drilling 34 holes totaling 54,000 feet. The infill and step out program focused on the existing historic resources at

Pumpkin Hollow, including the East Deposit, E-2 deposit, North deposit and South deposit. Several high-grade intercepts of tens of feet to a couple hundred feet of 1% to 5% copper were encountered during the 2007 drill program. The company also assayed or re-assayed 17,000 feet of available historic drill core. It released a new resource estimate in November of 2007 based on both historic and more recent drilling. The total measured and indicated resource, using a 0.20% copper cut-off grade, is 342,735,000 tons of 0.579% copper, 15.67% iron, 0.0019 opt gold and 0.0777 opt silver. Using a cut-off grade of 0.75% copper, the measured and indicated resource is 126,321,000 tons of 1.039% copper, 14.53% iron, 0.0030 opt gold and 0.1044 opt silver. The inferred resource at a cut-off grade of 0.2% copper is 438,164,000 tons of material grading 0.446% copper, 10.23% iron, 0.0015 opt gold and 0.0700 opt silver. The East deposit would be mined underground, whereas the North and South deposits are potentially open-pittable. Significant potential exists to expand the resources at all the deposits. A standalone estimate of the iron resource was also released. At a cut-off grade of 20% iron, the measured and indicated resource is 119,755 tons of 35.9% iron, and the inferred resource is 135,144 tons of 34.15% iron. In March of 2008, based on work completed to the end of 2007, Nevada Copper released a preliminary economic assessment, using copper prices from \$1.75/lb to \$3.00/lb, that indicates a net present value of \$765 million to \$1.9 billion (8% discount rate). The capital costs are estimated to be \$780 million. Annual production would average 95,000 tons of copper per year over a mine life exceeding 20 years. (Nevada Copper press releases, 4/17/2007, 4/24/2007, 5/8/2007, 5/31/2007, 6/14/2007, 6/22/2007, 7/26/2007, 9/14/2007, 10/9/2007, 11/2/2007, 1/14/2008, 3/17/2008; Nevada Copper website, www.nevadacopper.com)

MINERAL COUNTY

Borealis District

Borealis. Gryphon Gold Corp. completed 44 reverse circulation holes. Thirty-one holes, totaling 33,120 feet, were drilled in and around the Graben resource to continue definition of the deposit boundaries and to test for extensions of internal high-grade zones. Drilling along the northwestern margin of the deposit identified a significant extension that was not anticipated. Highlights of the Graben drilling included 185 feet

grading 0.19 opt gold, 230 feet averaging 0.11 opt gold, and 245 feet grading 0.09 opt gold. Seven holes totaling 2,909 feet were completed on the Lucky Boy target in the Central Pediment area, northwest of the Graben deposit, and, farther west, six holes totaling 7,575 feet were drilled in the Vuggy Hills and Sunset Wash targets in the West Pediment area. Drilling at Lucky Boy and Sunset Wash identified large areas of quartz-pyrite alteration that contain anomalous gold. For example, hole GGC-WP03 intersected 595 feet that had detectable gold, which included 20 feet that averaged 0.01 opt gold. (Gryphon Gold press release 1/9/2008; Gryphon Gold website, www.gryphongold.com)

NYE COUNTY

Bare Mountain District

Reward. Canyon Resources Corp. completed a feasibility study and released a reserve estimate for its Reward Gold Project located near Beatty. Proven and probable reserves total 5.2 million tons averaging 0.027 opt gold and containing 138,000 ounces of gold. As part of the feasibility study, Canyon drilled four core holes in 2007. (Canyon Resources press releases, 3/23/2007, 2/22/2008; Canyon Resources website, www.canyonresources.com)

Sterling. Imperial Metals Corp. completed a 3,352-foot underground decline to provide access to the 144 zone. The completed development included two exploration drifts off the main decline below the 144 zone and drill stations that will provide for detailed drilling of the 144 zone from underground. In the decline east of the currently defined 144 zone, chip sampling of the ribs intersected over 150 feet that averaged 0.039 opt gold. This mineralization is hosted in breccias similar to the lower grade breccia envelope that surrounds the higher grade mineralization in the 144 zone. (Imperial Metals Corp. press release, 11/8/2008; Imperial Metals website, www.imperialmetals.com)

Bellehelen District

Merger. Golconda Resources Ltd. drilled two core holes near the old Merger mine, which produced about 450,000 ounces of silver before 1927. The first hole, drilled 100 feet east of a 1981 core hole with a reported 360 foot intercept averaging one opt silver, encountered 700 feet of anomalous silver mineralization. The best assay was 0.04 opt silver. The second hole intersected a quartz stockwork that was over 500 feet thick, but the hole did not have any significant silver values. (Golconda Resources Ltd. press releases, 10/29/2007, 2/13/2008).

Bullfrog District

North Bullfrog. International Tower Hill Mines Ltd. (joint venture with Redstar Gold Corp.) drilled six core holes totaling 4,285 feet on its North Bullfrog project, located about six miles north of the old Bullfrog open pit mine. Silicification of volcanic rocks is widespread in the project area and is accompanied by low-grade disseminated gold mineralization (Sierra Blanca, Jolly Jane areas). Quartz-adularia-calcite veins and stockworks are common and locally contain high gold grades (Pioneer, Yellowjacket, Mayflower areas). Mineralization also occurs within Paleozoic rocks (Savage, Connection areas). Three of the targets areas were tested with the 2008 drill program. In the Pioneer area, hole NB0704 encountered 1.3 feet grading 0.513 opt gold and 4.1 feet grading 0.107 opt gold within a wider zone of 26.4 feet averaging 0.059 opt gold. In the Sierra Blanca area, hole NB0702 intersected 9.8 feet of 0.060 opt gold within a wider zone of 24.9 feet of 0.032 opt gold. At the Savage target, hole NB0705 tested an area where scattered outcrops of Paleozoic quartzite contain gold up to 0.032 opt; however, the hole contained only weakly anomalous gold. (Redstar Gold press release, 9/5/2007; Redstar website, www.redstargold.com)

Fairplay District

Gabbs. Newcrest Mining Ltd. appears to have focused its 2007 drill program on a porphyry copper-gold discovery, called Lucky Strike, which is located about a mile northwest of the old Sullivan mine. The mineralization is flat-lying and has been intersected over an area of 2600 by 1600 feet. Significant results include 410 feet

grading 0.24% copper and 0.012 opt gold, beginning at a depth of 345 feet in hole G-44. Hole G-41 intercepted 465 feet averaging 0.16% copper and 0.006 opt gold. Newcrest staked 376 claims in 2007 to expand its property position. (Newcrest Mining website, www.newcrest.com.au; BLM LR2000 database)

Hannapah District

Thunder Mountain. Midway Gold Corp. drilled seven reverse circulation holes at its Thunder Mountain project, located six miles southeast of its Midway project. The highlight was hole TM07-04, which encountered five feet grading 1.187 opt gold that was contained within 20 feet grading 0.342 opt gold in silicified volcanic breccia. (Midway Gold Corp. press release, 10/18/2008; Midway Gold website, www.midwaygold.com)

Manhattan District

Gold Wedge. Royal Standard Minerals Inc. continued to develop its Gold Wedge underground gold deposit. Work focused on refining the operation of the plant. Mined and stockpiled material provided feed for the plant. The grade ranged from 0.04 opt to 0.15 opt gold with a feed rate of about 350 to 400 tons a day. Five surface core holes were drilled in 2007, of which four holes were aligned across strike, northwest of the underground mining program. Three of those holes intersected volcanic cover more than 900 feet thick. The fourth hole did hit limestone, but returned no significant gold values. The fifth hole tested the down-dip extension of a previous hole that intercepted 220 feet of 0.365 opt gold. Assay results were not released. (Royal Standard Minerals Inc. press releases, 6/4/2007, 7/9/2007, 9/20/2007, 10/22/2007, 11/19/2007; Royal Standard website, www.royalstandardminerals.com)

Ralston Valley area

Ralston Valley. Golconda Resources Ltd. drilled two holes at its Ralston Valley project south of Baxter Springs. The first hole was lost at 1,420 feet depth, and the second hole was drilled at the same site in order to get to the target depth. Both holes drilled through upper plate siliciclastic rocks and intersected lower plate limestones at a depth of 920

feet. Decalcification and silicification were encountered at depths between 1380 and 1450 feet and 1550 to 1775 feet. The highest assay was 0.016 opt gold. (Golconda Resources Ltd. press releases, 4/4/2008; Golconda Resources website, www.golcondaresources.com)

Moores Creek District

Gold Junction. Mexivada Mining Inc. drilled three flooded reverse circulation holes on its Gold Junction project. The drill holes were designed to test for open pit mineralization similar to the nearby Gold Hill and Round Mountain deposits. No significant gold values were encountered. Variably altered tuffs with local zones of silicification, quartz veinlets, pyrite and anomalous gold were encountered in two of the holes. (Mexivada website, www.mexivada.com)

Northumberland District

Northumberland. Newmont Mining Corp. drilled about 32 holes in 2007, mainly in and around the Zanzibar deposit and its down-dip extension. In February 2008, it returned the property to Fronteer Development Group. In June 2008 Fronteer released a new gold resource estimate based on the drilling Newmont completed from 2005 to 2007. The total measured and indicated resource was increased to 40,254,000 tons at an average grade of 0.06 opt gold, for a total of 2,259,000 ounces of gold. About 75% of that resource has been categorized as “open pit sulfide”. (Fronteer press releases, 10/11/2007, 2/6/2008, 6/5/2008; Fronteer website, www.fronteergroup.com)

Round Mountain District

Round Mountain. After completing a program of nearly 42,000 feet of underground drilling and sampling along a decline aimed to test the Deep NW zone, Kinross Gold Corp. (joint venture with Barrick Gold Corp.) decided that results are insufficient to warrant future development as a standalone underground mine. The focus was shifted to expanding the open pit, and exploration efforts were redirected to other targets within the Round Mountain property. (Kinross Gold 2007 Third Quarter Report; Kinross Gold website, www.kinross.com)

Rye Patch District

Midway. Midway Gold Corp. did not drill in 2007. Based on previous drilling, Midway announced that it identified 12 veins with average grades of greater than 0.15 opt gold. The number of drill intercepts for each vein range from four to 18. The average widths range from 2.5 to 12 feet, and the average grades range from 0.143 to 4.387 opt gold, with the Midway Vein being the widest, highest-grade vein. In 2008, Midway will begin permitting a decline for underground development program to test for continuity of grade and thickness. (Midway Gold press release, 8/20/2007; Midway Gold website, www.midwaygold.com)

San Antone District

Hall-Tonopah. As part of a pre-feasibility study started in 2007, General Moly Inc. drilled 33 core holes and 13 reverse circulation holes in order to test areas of known molybdenum mineralization as well as to delineate areas of higher grade mineralization. They tested the east upper zone associated with copper-molybdenum mineralization that was partially mined by Equatorial Mining in the late 1990s and a second deep zone in the adjacent primary molybdenum open pit which was developed and partially mined by Anaconda Company and Cyprus Minerals, Inc. between 1982 and 1991. The new drilling confirmed previous drill results for the upper orebody and indicated near surface molybdenum grades above 0.10% on the east side of the existing open pit that was mined for molybdenum. Additionally, molybdenum grades greater than 0.20% were intersected in the lower ore body below the existing pit. (General Moly press releases, 3/5/2007, 5/8/2007, 11/28/2007, 1/2/2008; General Moly website, www.generalmoly.com)

Silverbow District

Silverbow. Golden Predator Mines Inc. carried out a small drilling program for which no results were released. (Golden Predator website, www.goldenpredator.com)

Tybo District

Bolo. Columbus Gold Corp. completed 19 reverse circulation holes totaling 9,890 feet. Drilling targeted gold mineralization where values up to 0.15 opt gold had been obtained in outcrop from jasperoids and limonite-stained structures cutting Cambrian and Ordovician sedimentary rocks along two parallel north-trending faults known as the Mine and East faults. The best intercept in the Mine fault area was from hole BL-4, which contained 60 feet grading 0.032 opt gold from a depth of 200 to 260 feet. Silver mineralization with grades up to 1.42 opt silver across 15 feet was encountered in several holes. Drilling in the East fault area encountered anomalous but not significant gold values. Hole BL-18 was drilled 1,200 feet east of the East fault in a gravel-covered area. The angle hole encountered highly silicified Paleozoic rocks under the cover at about 410 feet vertically below the surface. The hole was anomalous in silver, arsenic and antimony, with sporadic weakly anomalous gold. (Columbus Gold Corp. press release, 2/13/2008; Columbus Gold website, www.columbusgoldcorp.com)

PERSHING COUNTY

Antelope District

Majuba Hill. Minterra Resources Corp. drilled nine reverse circulation holes totaling 4,125 feet at its Myler target zone on their Majuba Hill property, which is centered on a 25-26 million year old rhyolitic intrusive complex that produced copper, tin, gold and silver in the past and contains significant molybdenum and zinc as well. Encouraging copper results were returned from seven of the holes, which were drilled from four sites in an area approximately 500 feet in diameter south of the peak of Majuba Mountain in the area of historic production. Highlights include 290 feet grading 0.49% copper, 230 feet averaging 0.37% copper, 315 feet grading 0.37% copper, and 70 feet averaging 0.59% copper. The mineralization is oxidized. (Minterra Resources Corp. press releases, 9/5/2007, 10/29/2007, 11/20/2007; Minterra website, www.minterra.ca)

Antelope Springs District

Fisher Canyon. Evolving Gold Corp. drilled 13 shallow, reverse circulation holes, totaling 3,185 feet. Twelve of the 13 holes encountered gold values ranging up to 0.121 opt gold. The best intercept was 85 feet of 0.025 opt gold, which included 25 feet of 0.048 opt gold. All holes penetrated a sequence of marly shale and basalt and terminated in limestone. (Evolving Gold Corp. press release, 2/1/2008; Evolving Gold website, www.evolvinggold.com)

Relief Canyon. In order to complete a resource estimate that is compliant with 43-101 regulations, Firstgold Corp. drilled 76 shallow, reverse circulation holes, totaling 20,073 feet, to augment many of the historic holes previously drilled in the open pit area. It also drilled 125 shallow reverse circulation holes and 57 sonic holes through the old heap leach pads in order to assess the feasibility of reprocessing them. (Firstgold press releases, 1/17/2008; Firstgold website, www.firstgoldcorp.com)

Relief Canyon. Victoria Resources drilled two core holes in Section 17 on the pediment northwest of the old Relief Canyon mine. Neither of the holes reached its intended target because of poor ground conditions. Victoria, through an agreement with Newmont Mining Corp., controls most of the South pit at the Relief Canyon mine in the southeast corner of section 17, and all of the claims surrounding the core set of claims overlying the remainder of the open pits, which are controlled by Firstgold Corp. (Victoria Resources press release, 3/22/2007; Victoria Resources website, www.victoriaresourcecorp.com)

Goldbanks District.

Goldbanks. Desert Gold Ventures Inc. (joint venture with Kinross Gold Corp.) reportedly carried out a 6,600 foot reverse circulation program aimed at testing a new target area located approximately 4,500 feet west of the KW zone. No results were released. (Desert Gold Ventures Inc. press release, 4/3/2007; Desert Gold website, www.desertgold.ca)

Mill City District.

Springer Mine/Mill. Golden Predator Mines Inc. began work to reopen the old General Electric Springer mine in January 2007, with the number of staff ramping up to 50 by early 2008. Applications for operational and environmental permits were submitted to the state in late 2007. The crushing and milling circuits were made operational and will be upgraded in 2008 from 1,000 tons per day to 1,200 tons per day. The sulfide and scheelite flotation cells were made operational. Circuits that were in the process of being upgraded or rebuilt included regrind and thickening lines, tungsten digester, molybdenum precipitation, automated mill controls, and the solvent extraction portion of the APT circuit. All improvements necessary to produce scheelite concentrate are scheduled for completion by the end of 2008. In addition, Golden Predator began to design a standalone 1,000 tpd gravity and carbon-in-leach gold circuit for the Springer Mine, for which permitting was under way at years end. Golden Predator initiated surface drilling in November 2007. The objectives of the drilling were to test the integrity of the historical resource estimates, to identify near-surface mineralization for resource modeling, and to better understand the geology of faulted areas. By the end of January 2008, five core holes and nine reverse circulation holes had been drilled and assay results had been reported for three holes. The Sutton beds were targeted in all 14 holes. These skarn-altered, scheelite-bearing beds historically have produced the greatest amount of tungsten ore on the property. Core holes SMC-001 and SMC-002 intersected scheelite-bearing skarn in both the hanging wall and footwall of the main Sutton beds. Hole SMC-002 intersected 11.5 feet grading 0.755% tungsten. Core holes SMC-004 and SMC-005 were drilled on the South Sutton beds and intersected long skarn intervals. Also, Golden Predator re-sampled 73 intervals from historic core holes for assay. (Golden Predator Mines Inc. press release, 4/28/2008; Golden Predator technical report, 1/28/2008; Golden Predator website, www.goldenpredator.com)

Mineral Basin District

Buena Vista. Boxxer Gold Corp. drilled two core holes totaling 1,849 feet. Hole DDH-BV07-5 targeted a deep induced polarization anomaly that is associated with a copper-bearing pyritic halo intersected by previous drilling and mapped at the surface. The hole intercepted three stratiform zones of sodic-calcic alteration. A fourth zone was intersected at 826 to 898.2 feet. It was characterized by sericitic alteration hosting

pyrite-chalcopyrite-bornite veinlets. The best intercept from that zone was 15 feet grading 0.22% copper. The second hole tested the up-dip extent of a mineralized unit intercepted in 2006. The hole intercepted the same sericitic alteration as the first hole. The best intercept was 2.5 feet grading 0.12% copper. (Boxxer Gold Corp. press release, 8/31/2008)

Scossa District

Scossa. Romios Gold Resources Inc. drilled five diamond core holes. No assay results were released. (Romios Gold Resources website, www.romios.com)

Spring Valley District

Spring Valley. Midway Gold Corp. continued its aggressive drill program in 2007 by drilling 113,000 feet in 188 holes. Of this drilling, 133 reverse circulation holes and nine core holes were in the Spring Valley resource area, 56 reverse circulation holes were drilled in the Limerick target area southeast of the Spring Valley resource area, four reverse circulation holes were drilled in the Golden Gate prospect area on the east flank of Golden Gate Hill, and six reverse circulation holes were drilled in the American Canyon target area three miles southeast of the Spring Valley resource area. Based on the 2007 and previous drilling in the Spring Valley resource area, Midway released a new resource estimate in January 2008 that was significantly larger than the estimate it released in early 2006. The inferred resource, using a 0.006 opt gold cut-off grade is now 50.5 million tons of 0.0196 opt gold for 992,152 ounces. When a cut-off grade of 0.020 opt gold is employed, the inferred resource is 17.7 million tons of 0.0327 opt gold for 577,602 ounces.

Spring Valley is a diatreme-hosted gold system completely covered by pediment gravels. The original discovery was called the Pond Zone. Midway expanded the gold deposit when it discovered the Deep Porphyry and Sill Zones in 2005 and the West Diatreme and North Hill Zones in 2006. Known gold zones cover an area 3,500 by 3,500 feet and extend from 50 to 1450 feet in depth. Deep core drilling in 2007 intercepted gold hosted in quartz-tourmaline veins in porphyry intrusions below the diatreme. Highlights from the 2007 drilling in the Spring Valley resource area include 55 feet grading 0.203 opt gold in hole SV07-283 (625-680 feet), which contained five feet

averaging 2.021 opt gold, and 135 feet grading 0.068 opt gold in SV07-281 (145-280 feet), which contained 20 feet averaging 0.387 opt gold. These holes were drilled along the northwest-trending North Hill fault zone, located just northeast of the Pond Zone. Highlights from the Deep Porphyry zone below the Pond Zone included 21 feet grading 0.202 opt gold in hole SV07-291C (467.5-488.5 feet), which contained 3.7 feet averaging 1.108 opt gold. Better intercepts in the West Diatreme Zone included 10 feet grading 0.964 opt gold in hole SV07-341 (225-235 feet) and 35 feet averaging 0.199 opt gold in hole SV07-319 (670-705 feet). Infill drilling between the Pond and West Diatreme Zones encountered gold as well, including 55 feet grading 0.228 opt in hole SV07-372, which contained 10 feet averaging 1.148 opt gold, and 73 feet grading 0.119 opt gold in hole SV07-294c, which contained five feet grading 1.062 opt gold.

Midway encountered silver mineralization in its drilling at American Canyon. Two holes, 430 feet apart along strike, intercepted silver mineralization associated with bedding replacement near a contact between shale and limestone. Hole AC07-02 intercepted 20 feet averaging 3.3 opt silver within a 70 foot zone grading 1.22 opt silver. Hole AC07-01 intercepted five feet averaging 0.5 opt silver, which was adjacent to a 25 foot interval that had no sample recovery. (Midway Gold press releases, 4/25/2007, 7/5/2007, 7/10/2007, 7/23/2007, 9/12/2007, 9/24/2007, 12/4/2007, 1/9/2008, 1/23/2008; March 7, 2008 43-101 Technical Report on Spring Valley; Midway Gold website, www.midwaygold.com)

Trinity District

Trinity Silver. Piedmont Mining Co. (joint venture with AuEx Ventures Inc.) drilled 15 reverse circulation holes totaling 9,375 feet in late 2007 and early 2008. Several holes had intercepts that graded greater than one opt silver. The best intercept was 110 feet grading 2.24 opt silver. Intercepts also contained lead and zinc, with combined grades up to almost 2% lead plus zinc. The results confirmed the continuation of silver mineralization beneath, and along the trend of, the old Trinity Silver open pit. (AuEx Ventures Inc. press release, 3/20/2008).

Velvet District

Bunce. AuEx Ventures Inc. (joint venture with North Range Resources Ltd.) drilled 18 reverse circulation holes totaling 16,480 feet. Some of the holes tested for deeper mineralization adjacent and beneath the known area of shallow, oxidized gold mineralization. The best intercepts were 60 feet grading 0.034 opt gold and 55 feet averaging 0.033 opt gold in the zone of known oxide mineralization. The best deep intercept was 20 feet of 0.011 opt gold from 680 to 700 foot depth. In addition, drilling tested the Velvet Basin area to the east, the Bunce Graben to the west and the large, previously untested Central area between these two areas. The best intercept was from the Velvet Basin area where 10 feet grading 0.112 opt gold was intercepted. Due to cost and time constraints, the drilling did not test the large geophysical target defined by gravity and magnetic surveys lying to the northwest of Velvet Basin. (AuEx Ventures Inc. press releases, 8/27/2007, 3/26/2007)

Swiss Bank. Hawkeye Gold and Diamonds Inc. (joint venture with AuEx Ventures Inc.) drilled 18 reverse circulation holes totaling 11,460 feet in two separate target areas. In the north area, nine holes were drilled to test deeper portions of a major north-south mineralized structural zone identified by mapping and surface sampling. In the south area, nine holes were drilled to test the southern extension of the same zone and east-west-trending dike-filled fault zone that contained anomalous gold values on the surface. The targeted structural zones were intercepted in most of the holes and five of the holes contained anomalous gold values. The best intercept was 15 feet grading 0.015 opt gold. (AuEx Ventures Inc. press release, 9/21/2007).

Washiki District

Washiki. Golden Odyssey Mining Inc. drilled four reverse circulation holes totaling 1,625 feet at its Washiki gold project located 30 miles south of Winnemucca. The program tested the hanging wall and down-dip extension of a high-grade vein target. No results were released. (Golden Odyssey Mining Inc. press release, 10/4/2007).

Willard District

Wilco. Rye Patch Gold Corp. drilled 48 reverse circulation holes totaling 30,520 feet and four core holes totaling 3,002 feet at its Wilco project, which includes the old Willard open pit mine and the Colado resource. The drilling was completed in five target areas – Willard Hill, South Pit, Section Line, Colado and Area 46.

Holes WR-01 to WR-05 were designed to confirm and extend known high-grade gold mineralization from past shallow drilling in the Section Line target area located 1,200 feet west of the previously mined Willard open pits. Visible gold in hole WR-01 between 225 to 230 feet was confirmed by an assay of 0.436 opt gold for that interval. This occurred within a 70-foot interval that graded 0.080 opt gold. In addition, deeper drilling in this area intercepted a second mineralized zone predicted by earlier detailed geologic mapping and cross-section modeling. The gold-bearing zone is open to the east, up dip, toward the previously mined Willard pits.

Holes WR-06 to WR-13 were drilled to confirm and extend known gold mineralization from past shallow drilling in the E-W Draw Pit target area. These holes extended known mineralization between 100 and 200 feet toward the northeast. The best intercept was 80 feet grading 0.031 opt gold (hole WR-007). Holes WR-025 and WR-027 were drilled north and west of the E-W Draw pit to test for extensions; however, neither hole intersected significant mineralization.

Holes WR-014 through WR-022 were drilled in the Willard Hill target area, where most of the previous mining activity took place. The shallow oxide gold mineralization intercepted in this area is localized within fractured to brecciated siltstone above the structural contact with an underlying claystone. No significant mineralization was found in the underlying claystone.

Holes WR-023, WR-024, WR-028, through WR-033, and WR-041 through WR-044 extended the Section Line mineralization in all directions. Hole WR-28, in which 105 feet grading 0.018 opt gold were intercepted, suggests the gold zone is thickening northward. Hole WR-032, which intercepted 85 feet grading 0.018 opt gold, established continuity of the mineralization between Willard Hill and the Section Line target area.

Holes WR-035 through WR-040 were drilled within the Colado gold resource area. Although the low-grade mineralization typical of Colado was confirmed and extended, only hole WR-40 intersected higher grade gold mineralization – 10 feet

grading 0.144 opt at about 238 feet below the surface. Two of four holes, designed to test the extension of the Colado resource area, intersected gold mineralization in a new target now designated Area 46, named after hole WR-046, which had two 65-foot intercepts grading 0.014 opt gold.

The core drilling focused on the Section Line discovery and confirmed the continuity of mineralization between reverse circulation holes and extended the mineralization further northward and southward. Highlights of the core drilling included 41.4 feet grading 0.045 opt gold in hole WRC-001. The interval included nine feet averaging 0.156 opt gold.

Based on the 2007 drilling and previous drilling, Rye Patch Gold released a new resource estimate in May, 2008. The total measured and indicated resource for both Willard and Colado, which includes oxide and sulfide categories, is estimated to be 41,041,000 tons grading 0.016 opt gold, which amounts to 625,517 ounces of gold. The inferred resource contains 1,124,776 ounces of gold at a grade of 0.011 opt gold. (Rye Patch Gold Corp. press releases, 9/24/2007, 11/29/2007, 1/9/2008, 5/12/2008; Rye Patch Gold technical report on Wilco, 6/10/2008; Rye Patch Gold website, www.ryepatchgold.com)

WASHOE COUNTY

San Emidio District

Wind Mountain. Fortune River Resource Corp. (JV with Agnico-Eagle) drilled 13 reverse circulation holes totaling 9,755 feet. The holes verified that a portion of the original Breeze deposit was not mined. Drill results also confirmed that near-surface, potentially leachable gold and silver ore remains unmined beneath and adjacent to existing open pits. For example, hole WM07012 intercepted 110 feet grading 0.0165 opt gold, starting at a downhole depth of 120 feet. Deeper intercepts (between 670 and 755 feet) in drill hole WM07006 and WM07009 (40 feet averaging 0.018 opt gold and 40 feet grading 0.013 opt gold) demonstrated down-dip continuation of strongly anomalous gold related to the Wind Mountain fault. Based on these data, Fortune River released a new resource estimate; the total measured plus indicated resource for the project is estimated to be 33.7 million tons with an average grade of 0.012 opt gold (406,000 ounces of gold). Fortune River can earn 100% interest by spending \$2.0 million over a

maximum of six years. Agnico-Eagle can then either accept a 2% net smelter royalty or elect to earn back 60% interest by spending \$4.0 million over a four year period and completing a feasibility study. (Fortune River Resources Corp. press release, 10/31/2008; Fortune River Technical Report, 12/17/2007; Fortune River website, www.fortuneriver.ca)

WHITE PINE COUNTY

Bald Mountain District

Bald Mountain. Barrick Gold Corp. carried out a major drilling program on its large Bald Mountain property, concentrated mainly on the Top/Sage Flats, Sage/Bida, and RBM areas, as well as other targets.. (P. Dobak, Barrick Gold Corp., oral commun., December, 2007; Barrick 2007 Annual and Quarterly reports, Barrick website, www.barrick.com)

Butte Valley District

Limousine Butte. US Gold drilled approximately 18,860 feet in 36 holes, which included 13 core holes and 23 reverse circulation holes, at its Limousine Butte property, which they now call Limo. Thirty-one holes were drilled at Resurrection Ridge-North Butte zone, which expanded known mineralization and began to outline a higher grade zone. The best result was 50 feet averaging 0.161 opt gold in hole L-23, which included 15 feet of 0.235 opt gold and 15 feet of 0.278 opt gold. Hole L-23 is located 325 feet southwest of hole L-10, which encountered 21 feet of 0.126 opt gold and 500 feet southwest of an older hole, RR04-07, which contained 60 feet of 0.249 opt gold. Exploration of the North Butte zone, just northwest of Resurrection Ridge, was designed to better define grade distribution in order to develop an initial resource estimate. Drilling there returned long intercepts of lower grade mineralization. The most significant results from North Butte were 185 feet of 0.018 opt gold in hole L-29 and 90 feet of 0.022 opt gold in hole L-18. Drilling between North Butte and Resurrection Ridge is beginning to show that these are two separate zones. Five holes were drilled at the Tincup target area six miles northeast of Resurrection Ridge. The best result was four feet of 0.020

opt gold. (US Gold annual report filed with the U.S. Securities and Exchange Commission (Form 10-K); US Gold website, www.usgold.com)

Diamond District

Gunman. Cypress Development Corp. drilled 18 core holes totaling 11,516 feet at its Gunman project. High-grade, replacement-style, oxidized zinc-silver mineralization occurs near surface within steeply dipping carbonate and clastic rocks. Sphalerite-pyrite-argentite mineralization occurs locally beneath the oxide mineralization at the known RH deposits. The 2007 drilling further confirmed the presence of high-grade zinc-silver mineralization in the RH deposit and has identified additional mineralization in a nearby step-out area 1,200 feet to the north of the RH. Highlights from RH included 23 feet grading 1.6% zinc and 0.65 opt silver (hole GD-01, 184-207 feet) and 54 feet averaging 4.0% zinc and 0.40 opt silver. North of the RH deposit, hole GD-15 intercepted 212 feet of zinc mineralization from 140 feet to 352 feet below surface. The best interval was two feet grading 1.5% zinc and 0.6 opt silver. (Cypress Development Corp. press release, 10/12//2007; Cypress website, www.cypressdevelopmentcorp.com)

Pancake District

Pan. Midway Gold corp. drilled at least 108 holes in 2007 and continued to expand known gold deposits and find new shallow, oxidized gold mineralization beyond the limits of known deposits. Drilling through post-mineral volcanic cover expanded the North Pan deposit northward about 1,000 feet. Intercepts include 75 feet grading 0.060 opt gold in hole PN07-04 (140-215 feet) and 95 feet averaging 0.016 opt gold in hole PN07-99 (335-430 feet). Within the North Pan deposit, confirmation holes encountered thicker intercepts and higher grades of gold than expected. Hole PN07-65 intersected 200 feet grading 0.032 opt gold (0-200 feet) that included 10 feet averaging 0.186 opt gold, and hole PN07-78, which tested a fault zone, intersected 190 feet grading 0.042 opt gold that contained 20 feet averaging 0.188 opt gold. Drilling expanded the South Pan deposit potentially 450 feet southeastward. Hole PN07-50 returned 10 feet grading 0.117 opt gold with an 85 foot zone averaging 0.036 opt gold (0-85 feet). Drilling continued to find gold in the Nana Zone, located 4,000 feet northwest of the current

resource area, where the best intercept in 2007 was 65 feet of 0.048 opt gold in hole PN07-21 (20-85 feet). Gold mineralization occurs along the contact of the Devils Gate Limestone and overlying Pilot Shale. (Midway Gold press releases, 6/5/2007, 8/7/2007, 8/10/2007, 9/18/2007, 10/2/2007, 11/1/2007, 11/27/2007; Midway Gold website, www.midwaygold.com)

Robinson District

Robinson. Exploration drilling by Quadra Mining Ltd. at its Robinson copper mine focused on the potential for additional reserves in the Veteran pit. (Quadra website, www.quadramining.com)

Nevada (Tamerlane) District (Tamberlaine Canyon area)

Tami-Mosi. Molycor Gold Corp. drilled 14 reverse circulation holes totaling 8,420 feet in four gold-bearing target areas out on the pediment under alluvial cover. The best gold intercept was five feet that assayed 0.030 opt gold, which occurred in silicified contact zones between the Joanna Limestone and the overlying Chainman Shale. The drilling did, however, intercept significant manganese and magnesium mineralization, including 15 feet of 35.2% manganese and 540 feet that averaged 11.4% magnesium.

Mineralogy was not reported. An old manganese mine operated in the early 1900s on the property. (Molycor Gold Corp. press releases, 2/22/2008, 3/14/2008; Molycor Gold website, www.molycor.com)

Taylor District

Taylor. Fury Explorations Ltd. released a resource estimate for the old Taylor silver mine based on historic drilling and 81 reverse circulation holes and 13 core holes totaling 21,287 feet, which it completed in 2006 and 2007. The measured and indicated resource is 6,433,000 tons of 2.31 opt silver (14,888,000 ounces of silver). The inferred resource is estimated to be 757,000 tons of 2.54 opt silver (1,923,000 ounces of silver). Fury plans to reopen the mine in early 2009. It believes it can rehabilitate the existing mill and plant facilities for \$2.5 million. Permitting is ongoing. Highlights of the 2007 drill campaign included 70 feet grading 6.72 opt silver (hole FT98, 30-100 feet), which

contained 20 feet averaging 15.00 opt silver. (Fury Explorations press releases, 1/30/2007, 4/18/2007, 6/5/2007; October 4, 2007 43-101 Technical Report on Taylor; Fury Explorations website, www.furyexplorations.com)

Major Precious-Metal Deposits

by John L. Muntean

The information in this compilation was obtained from the Nevada Division of Minerals and from published reports, articles in mining newsletters, and company websites, annual reports, and press releases. Locations of most of these deposits are shown on NBMG Map 149, and most active mines are shown on page 2 of this publication.

opt = troy ounces per short ton.

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
CHURCHILL COUNTY				
Bell Mountain (Bell Mountain district)	1982: 1 million tons, 0.055 opt Au, 1.4 opt Ag 1989: reserves-30,000 oz Au, 125,000 oz Ag 1997: 2.5 million tons, 0.059 opt Au equiv. oz		rhyolitic tuff	Miocene
Buffalo Valley gold property (Eastgate district)	1996: 96,000 oz Au		rhyolitic ash-flow tuff	Tertiary
Dixie Comstock (Dixie Valley district)	1991: 2.4 million tons, 0.049 opt Au 1995: 100,000 oz Au		Tertiary rhyolite	Miocene?
Fondaway Canyon (Shady Run district)	1988: 400,000 tons, 0.06 opt Au 1990: 400,000 tons, 0.06 opt Au 2001: 396,000 tons, 0.428 opt Au (indicated resource) 372,849 tons, 0.409 opt Au (inferred resource)	1989: 1,065 oz Au, 87 oz Ag 1990: 12,000 oz Au	Triassic slate and phyllite	
Jessup (Jessup district)	1998: 8,376,564 tons, 0.024 opt Au, 0.25 opt Ag ("global resource") 2007: 5,432,000 tons, 0.022 opt Au, 0.31 opt Ag (indicated resource); 1,265,000 tons, 0.017 opt Au, 0.23 opt Ag (inferred resource)			
New Pass property (New Pass district)	1994: 3.4 million tons, 0.042 opt Au 1997: 3.1 million tons, 0.055 opt Au 2006: 11.5 million tons, 0.0226 opt Au, 0.0041 opt Ag (inferred resource)		Triassic siltstone	
CLARK COUNTY				
Crescent property (Crescent district)	1992: 390,000 tons, 0.05 opt Au; 3.3 million tons, 0.022 opt Au			
Keystone (Goodsprings district)	1990: <i>estimated geologic resource</i> -64 million tons, 0.05 opt Au 1992: 110,000 tons, 0.11 opt Au	1990: ~1,000 oz Au 1993: idle	lower Paleozoic carbonate rocks	Triassic
ELKO COUNTY				
Big Springs (Independence Mountains district)	1987: 3.76 million tons, 0.148 opt Au 1989: 1.55 million tons, 0.172 opt Au 2005 (inferred resource, 0.025 opt Au cut-off): 15.145 million tons, 0.078 opt Au 2005 (inferred resource, 0.3 opt Au cut-off): 468,000 tons, 0.45 opt Au	1987-88: ~106,000 oz Au 1989-92: 274,000 oz Au, 48,000 oz Ag 1993: 52,752 oz Au 1994-95: 30,095 oz Au, 2,877 oz Ag	Mississippian to Permian overlap assemblage clastic and carbonate rocks	Eocene
Bootstrap/Capstone/ Tara (Bootstrap district)	1989: <i>geologic resource</i> -25.1 million tons, 0.039 opt Au 1996: 20.2 million tons, 0.046 opt Au proven and probable reserves; 1 million tons, 0.086 opt Au mineralized material	1988-90: included in Newmont Gold production at the end of this section 1996: 19,800 oz Au 1999: 147,088 oz Au, 28,395 oz Ag 2000: 131,979 oz Au, 13,402 oz Ag	dacitic dikes, Paleozoic siltstone and laminated limestone/chert	Eocene

MAJOR PRECIOUS-METAL DEPOSITS, ELKO COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
		2001: 92,775 oz Au, 21,093 oz Au 2002: 23,415 oz Au, 4,717 oz Ag 2003: 29,742 oz Au, 5,480 oz Ag 2004: 154,521 oz Au, 43,566 oz Ag 2005: 3,849 oz Au, 322 oz Ag 2006: 2,019 oz Au, 436 oz Ag		
Burns Basin (Jerritt Canyon, Independence Mountains district)	2005-2007: 29,700 tons, 0.134 opt Au (open pit indicated resource) 30,700 tons, 0.194 opt Au (underground indicated resource), 50,600 tons, 0.23 opt Au (underground inferred resource)		Hanson Creek and Roberts Mountains Formations	
California Mountain (Jerritt Canyon, Independence Mountains district)	2005-2007: 8,000 tons, 0.11 opt Au (open pit indicated resource) 32,100 tons, 0.38 opt Au (underground indicated resource), 9,400 tons, 0.33 opt Au (underground inferred resource)		Hanson Creek and Roberts Mountains Formations	
Coyote Zone (Jerritt Canyon, Independence Mountains district)	2005-2007: 45,200 tons, 0.21 opt Au (underground indicated resource) 2,700 tons, 0.18 opt Au (underground inferred resource) 2006-2007: 20,100 tons, 0.104 opt Au (open pit inferred resource)		Hanson Creek and Roberts Mountains Formations	
Cobb Creek (Mountain City district)	1988: <i>geologic resource</i> -3.2 million tons, 0.045 opt Au			
Cord Ranch (Robinson Mountain district)	1991: 3.5 million tons, 0.037 opt Au 1994: 350,000 oz Au in 3 deposits (see Piñon)		Webb Formation Devils Gate Formation Tomera Formation Diamond Peak Formation	
Dee (Bootstrap district)	1982: 2.5 million tons, 0.12 opt Au 1990: 4.5 million tons, 0.059 opt Au 1999: 1.4 million tons, 0.157 opt Au, proven and probable reserves	1985-88: 189,983 oz Au 1989-92: 172,745 oz Au, 142,000 oz Ag 1993-95: 97,860 oz Au 1996: 45,070 oz Au, 50,322 oz Ag 1997-98: 72,595 oz Au 1999: 36,329 oz Au, 68,400 oz Ag 2000: 61,171 oz Au, 110,900 oz Ag 2001: 2,351 oz Au, 6,028 oz Ag	Vinini Formation, Devonian carbonate rocks, dacitic dikes	Eocene
Doby George (Aura district)	1995: 3.7 million tons, 0.060 opt Au 1997: 250,000 oz Au		Schoonover	
Hollister (Ivanhoe district)	1989: oxide-18.4 million tons, 0.035 opt Au; estimated mineral inventory 83.5 million tons, 0.034 opt Au, with 52.8 million tons of oxide and 30.7 million tons of sulfide 1995: <i>geologic resource</i> -1,300,000 oz Au; 42 million tons of 0.031 opt Au (combined oxide and sulfide) 2001: 719,000 tons, 1.29 opt Au, 7 opt Ag 2007 (May, 0.25 opt Au cut-off grade): 903,000 tons, 1.03 opt Au, 5.71 opt Ag (measured and indicated resource) 805,000, tons, 1.08 opt Au, 3.94 opt Ag (inferred resource)	1990: 6,000 oz Au 1991: 60,000 oz Au 2007: 4,066 oz Au, 38,885 oz Ag	rhyolitic tuff, flows	Miocene

MAJOR PRECIOUS-METAL DEPOSITS, ELKO COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
	2008 (June, 0.25 opt Au cut-off grade): 1,615,000 tons, 0.87 opt Au, 4.57 opt Ag (measured and indicated resource) 1,252,000 tons, 0.51 opt Au, 1.43 opt Ag (inferred resource)			
Jerritt Canyon Property (Independence Mountains district)	1981: 12.5 million tons 0.231 opt Au 1989: 21.6 million tons, 0.143 opt Au mill ore; 6.5 million tons, 0.043 opt Au leachable 1999: 1.5 million oz Au, proven and probable reserves; 3.8 million oz Au other 2000: 1.3 million oz Au proven and probable; 3.7 million oz Au other mineralized material 2001: 2.058 million oz Au proven and probable; 893,000 oz Au other 2002: 580,913 oz Au, proven and probable reserves; 1.296 million oz Au measured and indicated resource; 1.035 million oz Au inferred resource 2003: 820,104 oz Au, proven and probable reserves; 2.295 million oz Au measured and indicated resource; 1.034 million oz Au inferred resource 2004: 9.988 million tons, 0.241 opt Au measured and indicated resource; 4.1 million tons, 0.219 opt Au inferred resource 2005: 3.723 million tons, 0.24 opt Au (proven and probable reserves); 8.812 million tons, 0.24 opt Au (measured and indicated resource, includes proven and probable reserves), 2.6465 million tons, 0.23 opt Au (inferred resource) 2006: 1.9849 million tons, 0.245 opt Au (proven and probable reserves); 8.2032 million tons, 0.232 opt Au (measured and indicated resource, includes proven and probable reserves), 2.4148 million tons, 0.226 opt Au (inferred resource) 2007: 3.1552 million tons, 0.227 opt Au (proven and probable reserves); 8.1969 million tons, 0.239 opt Au (measured and indicated resource, includes proven and probable reserves); 2.3197million tons, 0.224 opt Au (inferred resource)	1981: ~2.6 million oz Au 1991: 1,380,000 oz Au, 25,000 oz Ag 1995: 1,296,492 oz Au 1999: 363,000 oz Au 2000: 334,747 oz Au 2001: 295,328 oz Au, 7,752 oz Ag 2002: 338,660 oz Au, 8,154 oz Ag 2003: 302,095 oz Au 2004: 243,333 oz Au 2005: 202,911 oz Au, 6,322 oz Ag 2006: 169,862 oz Au, 7,154 oz Ag 2007: 121,700 oz Au, 17,560 Oz Ag	Hanson Creek and Roberts Mountains Formations	Eocene
Kinsley Mountain (Kinsley district)	1988: 2.1 million tons, 0.048 opt Au 1996: 3.4 million tons, 0.032 opt Au	1993: evaluation 1995-97: 127,065 oz Au, 24,452 oz Ag 1998: 9,543 oz Au 1999: 1,543 oz Au	upper Paleozoic carbonate rocks	Oligocene?
Maverick Springs (Maverick Springs area)	2002: 350,000 oz Au, 32.3 million oz Ag, indicated resource; 747,000 oz Au, 68.8 million oz Ag, inferred resource 2004: 69.63 million tons, 0.01 opt Au, indicated resource; 85.55 million tons, 0.008 opt Au, inferred resource			
Meikle (Lynn district)	1992: <i>geologic resource</i> -7.9 million tons, 0.613 opt Au 1999: 5.9 million tons, 0.647 opt Au proven and probable reserves; 3.3 million tons, 0.457 opt Au mineralized material 2000: 4.9 million tons, 0.540 opt Au proven and probable reserves; 2.9 million tons, 0.450 opt Au mineral resource 2001: 9 million tons, 0.439 opt Au proven and probable reserves; 13.5 million tons, 0.433 opt Au mineral resource 2002: 9.8 million tons, 0.398 opt Au proven and probable reserves; 12.9 million tons, 0.396 opt Au mineral resource	1996: 78,442 oz Au 1997-98: 1,421,621 oz Au, 426,030 oz Ag 1999: 977,356 oz Au, 263,225 oz Ag 2000: 805,718 oz Au, 205,000 oz Ag 2001: 712,688 oz Au, 213,370 oz Ag 2002: 640,337 oz Au, 203,574 oz Ag 2003: 551,664 oz Au, 99,614 oz Ag 2004: 561,345 oz Au,	Popovich and Roberts Mountains Formations	Eocene

MAJOR PRECIOUS-METAL DEPOSITS, ELKO COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
	2003: 3,316,000 tons, 0.467 opt Au proven reserves 5,862,000 tons, 0.326 opt Au probable reserves 1,580,000 tons, 0.435 opt Au measured resource 4,261,000 tons, 0.423 opt Au indicated resource 7,725,000 tons, 0.366 opt Au inferred resource 2004: 7,575,000 tons, 0.392 opt Au proven and probable reserves; 6,268,000 tons, 0.379 opt Au mineral resource 2005 (includes all underground resources at Goldstrike): 7.319 million tons, 0.379 opt Au proven and probable reserves; 3.234 million tons, 0.386 opt Au measured and indicated resource; 3.034 million tons, 0.386 opt Au inferred resource 2006 (includes all underground resources at Goldstrike): 7.662 million tons, 0.370 opt Au proven and probable reserves; 4.143 million tons, 0.338 opt Au measured and indicated resource; 2.159 million tons, 0.301 opt Au inferred resource 2007 (includes all underground resources at Goldstrike): 7.423 million tons, 0.364 opt Au proven and probable reserves; 4.129 million tons, 0.329 opt Au measured and indicated resource; 2.747 million tons, 0.371 opt Au inferred resource	129,520 oz Ag 2005 (includes all underground production at Goldstrike): 509,568 oz Au, 133,979 oz Ag 2006 (includes all underground production at Goldstrike): 477,035 oz Au, 58,345 oz Ag 2007 (includes all underground production at Goldstrike): 413,186 oz Au, 74,000 oz Ag		
MCE (Jerritt Canyon, Independence Mountains district)	2005-2007: 4,400 tons, 0.20 opt Au (underground measured and indicated resource) 7,800 tons, 0.19 opt Au (underground inferred resource)		Hanson Creek and Roberts Mountains Formations	
Midas (Ken Snyder) Mine (Gold Circle district)	1995: 13 million tons, 0.16 opt Au, 2.7 opt Ag, announced resource, proven Au reserves<500,000 oz 1996: 1.1 million tons, 1.324 opt Au, 14.95 opt Ag 1999: 3.0 million tons, 0.816 opt Au, 9.835 opt Ag proven and probable reserves 2000: 3.4 million tons, 0.63 opt Au, 7.77 opt Ag proven and probable reserves 2002: 3.4 million tons, 0.65 opt Au proven and probable reserves; 400,000 tons 0.46 opt Au measured and indicated mineralized material; 200,000 tons 0.55 opt Au inferred mineralized material 2003: 700,000 tons, 0.83 opt Au proven reserves; 2,700,000 tons, 0.51 opt Au probable reserves; 900,000 tons 0.42 opt Au indicated material 2004: 2.9 million tons, 0.510 opt Au proven and probable reserves; 200,000 tons, 0.58 opt Au indicated resource; 700,000 tons, 0.31 opt Au inferred resource 2005: 1.5 million tons, 0.58 opt Au, proven and probable reserves; 600,000 tons, 0.42 opt Au, inferred resource 2006: 1.2 million tons, 0.47 opt Au, proven and probable reserves (which includes 6,800,000 oz Ag); 800,000 tons, 0.33 opt Au, inferred resource 2007: 1.0 million tons, 0.493 opt Au, proven and probable reserves (which includes 7,500,000 oz Ag); 200,000 tons, 0.345 opt Au, measured and indicated resource; 100,000 tons, 0.3013 opt Au, inferred resource	1998: 4,357 oz Au, 55,329 oz Ag 1999: 189,081 oz Au, 1,938,470 oz Ag 2000: 197,800 oz Au, 1,941,989 oz Ag 2001: 198,518 oz Au, 2,393,246 oz Ag 2002: 232,949 oz Au, 2,870,164 oz Ag 2003: 218,966 oz Au, 2,647,374 oz Ag 2004: 219,778 oz Au, 2,471,135 oz Ag 2005: 167,297 oz Au, 2,166,396 oz Ag 2006: 140,884 oz Au, 1,694,060 oz Ag 2007: 79,133 oz Au, 1,040,059 oz Ag	Tertiary volcanic rocks	Miocene
Mill Creek (Jerritt Canyon, Independence Mountains district)	2005-2007: 78,400 tons, 0.12 opt Au (measured and indicated resource)		Hanson Creek and Roberts Mountains Formations	
Murray (incl. Zone 9) (Jerritt Canyon, Independence Mountains district)	2005: 243,300 tons, 0.26 opt Au (proven and probable reserves) 789,200 tons, 0.29 opt Au (measured and indicated resource, includes reserves) 2006: 18,400 tons, 0.266 opt Au (proven and probable reserves); 393,300 tons, 0.290 opt Au (measured and indicated resource, includes reserves); 152,000 tons, 0.220 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	

MAJOR PRECIOUS-METAL DEPOSITS, ELKO COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
	2007: 393,300 tons, 0.290 opt Au (measured and indicated resource); 152,000 tons, 0.220 opt Au (inferred resource)			
Pie Creek (Jerritt Canyon, Independence Mountains district)	2005-2007: 190,200 tons, 0.16 opt Au (measured and indicated resource) 28,300 tons, 0.14 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	
Piñon (South Bullion and Dark Star) (Robinson Mountain district)	1996: 38.3 million tons, 0.026 opt Au geologic mineral inventory 2002: 30.6 million tons, 0.026 opt Au, measured, indicated, and inferred resource		Webb Formation siltstone Devils Gate Limestone	
Pony Creek (Robinson Mountain district)	1994: <i>geologic resource</i> -1.1 million tons, 0.057 opt Au 2004: 32.41 million tons, 0.044 opt Au (inferred resource)			
Railroad Property (POD zone) (Railroad district)	1997: 1.5 million tons, 0.085 opt Au drill-indicated resource			
Rain Property (Carlin district)	1982: 3.4 million tons, 0.147 opt Au and 8.3 million tons, 0.083 opt Au			
Gnome deposit	1988: 2.7 million tons, 0.048 opt Au		Webb Formation	Eocene
Emigrant Springs deposit	2005: 1,531,165 oz Au (proven and probable reserves)		Webb Formation	Eocene
Rain deposit	1999: 13,467,000 tons, 0.026 opt Au proven and probable open-pit ore, 411,000 tons, 0.316 proven and probable underground ore	1999: 23,477 oz Au 2000: 25,004 oz Au, 2,539 oz Ag 2001: 43,488 oz Au, 9,887 oz Ag 2002: 20,065 oz Au, 4,042 oz Ag 2003: 5,039 oz Au, 928 oz Ag 2004: 1,956 oz Au, 551 oz Ag 2005: 404 oz Au, 90 oz Ag		
SMZ deposit	1989: <i>geologic resource</i> -1.6 million tons, 0.019 opt Au			
Rain district	2000: 13.5 million tons, 0.026 opt Au proven and probable open-pit ore; 308,000 tons, 0.267 opt Au proven and probable underground ore 2001: 13.5 million tons, 0.026 opt Au proven and probable open-pit ore; 21,000 tons, 0.024 opt Au proven and probable underground ore; 1.3 million tons, 0.048 opt Au mineralized material			
REN (Bootstrap district)	2003: 2.1 million tons, 0.43 opt Au (inferred resource) 2005: 2.1 million tons, 0.38 opt Au (indicated resource); 1.4 million tons, 0.37 opt Au (inferred resource) 2006: 2,713,000 tons, 0.37 opt Au (indicated resource); 758,000 tons, 0.47 opt Au (inferred resource) 2007: 2,991,000 tons, 0.37 opt Au (indicated resource); 835,000 tons, 0.47 opt Au (inferred resource)			
Road Canyon (Jerritt Canyon, Independence Mountains district)	2005-2007: 148,600 tons, 0.14 opt Au (measured and indicated resource); 74,300 tons, 0.13 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	

MAJOR PRECIOUS-METAL DEPOSITS, ELKO COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Rossi Mine (Storm resource) (Bootstrap district)	1998: 3.1 million tons, 0.371 opt Au resource 2000: 2.7 million tons, 0.345 opt Au resource 2002: 1.9 million tons, 0.335 opt Au measured and indicated resource; 1 million tons, 0.0335 opt Au inferred resource 2005 and 2006: 500,000 tons, 0.449 opt Au (measured and indicated resource) 800,000 tons, 0.376 opt Au, inferred resource		Popovich Formation Bootstrap Limestone Rodeo Creek Formation	
SSX-Steer (Jerritt Canyon, Independence Mountains district)	2005: 1,333,300 tons, 0.25 opt Au (proven and probable reserves) 2,597,500 tons, 0.28 opt Au (measured and indicated resource, includes reserves) 1,052,200 tons, 0.23 opt Au (inferred resource) 2006: 739,400 tons, 0.266 opt Au (proven and probable reserves); 2,332,500 tons, 0.266 opt Au (measured and indicated resource, includes reserves); 929,700 tons, 0.23 opt Au (inferred resource) 2007: 900,000 tons, 0.226 opt Au (proven and probable reserves); 2,561,400 tons, 0.259 opt Au (measured and indicated resource, includes reserves); 959,200 tons, 0.236 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	
Saval (Jerritt Canyon, Independence Mountains district)	2005: 104,400 tons, 0.23 opt Au (proven and probable reserves) 460,500 tons, 0.25 opt Au (measured and indicated resource, includes reserves) 270,000 tons, 0.25 opt Au (inferred resource) 2006: 120,200 tons, 0.246 opt Au (proven and probable reserves); 369,300 tons, 0.254 opt Au (measured and indicated resource, includes reserves); 191,200 tons, 0.238 opt Au (inferred resource) 2007: 120,200 tons, 0.246 opt Au (proven and probable reserves); 379,800 tons, 0.252 opt Au (measured and indicated resource, includes reserves); 107,400 tons, 0.206 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	
Smith (Jerritt Canyon, Independence Mountains district)	2005: 949,300 tons, 0.29 opt Au (proven and probable reserves) 1,863,300 tons, 0.28 opt Au (measured and indicated resource, includes reserves) 677,000 tons, 0.24 opt Au (inferred resource) 2006: 269,000 tons, 0.332 opt Au (proven and probable reserves); 1,064,400 tons, 0.290 opt Au (measured and indicated resource, includes reserves); 541,600 tons, 0.231 opt Au (inferred resource) 2007: 954,100 tons, 0.282 opt Au (proven and probable reserves); 1,236,900 tons, 0.278 opt Au (measured and indicated resource, includes reserves); 534,000 tons, 0.221 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	
Smith East (Jerritt Canyon, Independence Mountains district)	2006: 997,400 tons, 0.281 opt Au (measured and indicated resource, includes reserves) 120,400 tons, 0.264 opt Au (inferred resource) 2007: 1,065,500 tons, 0.287 opt Au (measured and indicated resource); 125,200 tons, 0.280 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	

MAJOR PRECIOUS-METAL DEPOSITS, ELKO COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
South Arturo (Bootstrap district)	2006: 12,644,000 tons, 0.060 opt Au (indicated resource) 786,000 tons, 0.053 opt Au (inferred resource) 2007: 17,928,000 tons, 0.070 opt Au (indicated resource); 612,000 tons, 0.022 opt Au		Popovich Formation Bootstrap Limestone Rodeo Creek Formation	
Starvation Canyon (Jerritt Canyon, Independence Mountains district)	2005: 400,500 tons, 0.30 opt Au (probable reserves) 676,400 tons, 0.28 opt Au (measured and indicated resource, includes reserves) 51,400 tons, 0.31 opt Au (inferred resource) 2006: 369,600 tons, 0.305 opt Au (probable reserves); 636,500 tons, 0.290 opt Au (measured and indicated resource, includes reserves); 51,200 tons, 0.278 opt Au (inferred resource) 2007: 571,600 tons, 0.282 opt Au (probable reserves); 697,300 tons, 0.287 opt Au (measured and indicated resource, includes reserves) 25,500 tons, 0.252 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	
Trout Creek (Contact district)	1988: 1.5 million tons, 0.04 opt Au	1988: exploration	Miocene sedimentary rocks	
Tuscarora (Dexter) (Tuscarora district)	1987: 2 million tons, 0.039 opt Au, 1.9 opt Ag 1988: 1.8 million tons, 0.037 opt Au, 0.74 opt Ag	1896-1902: 29,940 oz Au, 28,543 oz Ag 1987-90: 34,163 oz Au, 189,865 oz Ag	Eocene rhyolitic ignimbrite and andesite	Eocene
Waterpipe II (Jerritt Canyon, Independence Mountains district)	2005-2007: 37,400 tons, 0.21 opt Au (underground inferred resource)		Roberts Mountains Formation	
West Mahala (Jerritt Canyon, Independence Mountains district)	2005 and 2006: 368,100 tons, 0.22 opt Au (underground measured and indicated resource); 141,900 tons, 0.21 opt Au underground inferred resource) 2007: 197,500 tons, 0.218 opt Au (underground indicated resource); 129,600 tons, 0.206 opt Au (inferred resource)		Hanson Creek and Roberts Mountains Formations	
Winters Creek (Jerritt Canyon, Independence Mountains district)	1986: 1.4 million tons, 0.146 opt Au 2005-2007: 148,900 tons, 0.22 opt Au underground measured and indicated resource; 37,200 tons, 0.2 opt Au, underground inferred resource		lower Paleozoic carbonate rocks	Eocene
Wright Window (Jerritt Canyon, Independence Mountains district)	1986: 1.3 million tons, 0.095 opt Au 2005-2007: 32,600 tons, 0.226 opt Au, (probable reserves); 97,800 tons, 0.16 opt Au, (measured and indicated resource, includes reserves); 19,000 tons, 0.23 opt Au (inferred resource)	1992: 3,500 oz Au	lower Paleozoic carbonate rocks	Eocene
ESMERALDA COUNTY				
Boss (Gilbert district)	1987: 500,000 tons, 0.07 opt Au 1990: reserves-637,500 tons, 0.023 opt Au <i>geologic resource</i> -31,000 oz Au 1996: see Castle		Ordovician sedimentary rocks	Miocene?
Castle (includes Boss) (Gilbert district)	1996: 3.7 million tons, 0.03 opt Au 1997: 10 million tons, 0.03 opt Au resource 2000: 215,000 oz Au indicated resource and 93,000 oz Au inferred resource		Ordovician Palmetto Formation	

MAJOR PRECIOUS-METAL DEPOSITS, ESMERALDA COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Gemfield (Goldfield district)	1996: 9.5 million tons, 0.04 opt Au 1998: 500,000 oz, 0.04 opt Au 2003: see Goldfield project 2004: 16,853,000 tons, 0.032 opt Au (measured and indicated resource); 1,001,000 tons, 0.022 opt Au (inferred resource) 2006: 12,459,000 tons, 0.031 opt Au (measured and indicated resource); 88,000 tons, 0.116 opt Au (inferred resource)		Sandstorm Rhyolite	21 Ma?
Goldfield Project (Goldfield district) <i>(see Gemfield, Goldfield Main, and McMahon Ridge)</i>	1983: 1.75 million tons, 0.087 opt Au 1994: 3.48 million tons, 0.071 opt Au 2003: 23,410,200 tons, 0.031 opt Au (measured and indicated resource) 10,239,100 tons 0.024 opt Au inferred resource (includes Goldfield Main, McMahon Ridge, and Gemfield) 2006: 16,856,000 tons, 0.034 opt Au (measured, indicated, and inferred resource, includes McMahon Ridge and Gemfield)	1903-45: 4.19 million oz Au, 1.45 million oz Ag 1989-97: 28,373 oz Au	andesite, rhyodacite, rhyolite	21 Ma
Goldfield Main (Goldfield district)	2004: 6,651,000 tons, 0.036 opt Au measured and indicated resource; 2,129,000 tons, 0.038 opt Au inferred resource			
Hasbrouck (Divide district)	1982: 5 million tons 0.06 opt Au, 1.5 opt Ag 1986: 12.9 million tons, 0.0291 opt Au, 0.59 opt Ag 1998: 7.7 million tons, 0.036 opt Au, 0.7 opt Ag 2003: 26,036,00 tons, 0.023 opt Au (indicated resource); 8,200,000 tons, 0.021 opt Au (inferred resource)		Siebert Formation tuff and volcaniclastic rocks	16 Ma
Hill of Gold deposit (Divide district)	1988: 500,000 tons, 0.04 opt Au, 0.40 opt Ag 1996: 1.6 million tons, 0.026 opt Au		Miocene silicic tuff	16 Ma
Mary-Drinkwater (Silver Peak district)	1991: 531,300 tons, 0.124 opt Au	1991: 25,000 oz Au, 8,000 oz Ag	Wyman Formation	Mesozoic?
McMahon Ridge (Goldfield district)	2004: 8,200,000 tons, 0.035 opt Au (measured and indicated resource) 171,000 tons, 0.019 opt Au (inferred resource) 2006: 4,138,000 tons, 0.042 opt Au (measured and indicated resource); 172,000 tons, 0.038 opt Au (inferred resource)			
Mineral Ridge (Silver Peak district)	1995: 5.2 million tons, 0.068 opt Au proven and probable reserves (includes Mary-Drinkwater) 1998: 4 million tons, 0.06 opt Au; 241,000 oz Au 2000: 2.84 million tons, 0.074 opt Au minable reserves 2002: 2.66 million tons, 0.079 opt Au total reserves 2003: 8.3 million tons, 0.061 opt Au resource (includes 2.66 million tons, 0.079 opt Au reserves)	1997: 13,793 oz Au, 7,907 oz Ag 1998: 8,582 oz Au, 4,877 oz Ag 1999: 27,145 oz Au, 19,915 oz Ag 2000: 2,200 oz Au, 1,000 oz Ag 2001: 1,399 oz Au, 424 oz Ag 2002: 397 oz Au, 396 oz Ag 2003: 675 oz Au, 704 oz Ag 2004: 3,638 oz Au, 3,062 oz Ag 2005: 1,589 oz Au, 1,073 oz Ag	Wyman Formation	Mesozoic?
Monte Cristo (Gilbert district)	2006: 363,760 tons, 0.190 opt Au, 0.583 opt Ag (inferred resource)	late 1980s: 300,000 tons, 0.072 opt Au	Tertiary andesite, lithic tuff	Tertiary
Tip Top (Fish Lake Valley district)	1997: 109,000 tons, 0.103 opt Au, 0.88 opt Ag indicated resource 1998: 168,000 tons, 0.088 opt Au inferred geologic resource		Tertiary quartz latite	

MAJOR PRECIOUS-METAL DEPOSITS, ESMERALDA COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Three Hills (Tonopah district)	1996: 3.2 million tons, 0.036 opt Au 1997: 6.3 million tons, 0.023 opt Au 2003: 5,736,000 tons, 0.023 opt Au (indicated resource)		Miocene Siebert Formation and Oddie Rhyolite	
Weepah (Weepah district)	1986: 200,000 tons, 0.1 opt Au, 0.4 opt Ag	1986-87: 58,000 oz Au	Wyman Formation	Cretaceous
EUREKA COUNTY				
Afgan (Antelope district)	1996: 80,000 oz Au drill-indicated resource 1999: 2.8 million tons, 0.037 opt Au oxide resource 2004: 1.85 million tons, 0.027 opt Au (indicated resource) 1.29 million tons, 0.026 opt Au (inferred resource)		Webb Formation	
Betze-Post (Lynn district)	1988: 128.4 million tons, 0.095 opt Au 1999: 135.6 million tons, 0.153 opt Au proven and probable reserves; 23.3 million tons, 0.099 opt Au mineralized material 2000: 116.4 million tons, 0.155 opt Au proven and probable; 55.9 million tons, 0.063 opt Au mineral resource 2001: 108.9 million tons, 0.151 opt Au proven and probable; 49.9 million tons, 0.069 opt Au mineral resource 2002: 107.1 million tons, 0.150 opt Au proven and probable reserves; 47.6 million tons, 0.070 opt Au mineral resource 2003: 61,551,000 tons, 0.128 opt Au proven reserves; 48,191,000 tons, 0.162 opt Au probable reserves; 14,077,000 tons, 0.059 opt Au measured resource; 23,326,000 tons, 0.061 opt Au indicated resource; 323,000 tons, 0.065 opt Au inferred resource 2004: 123,334,000 tons, 0.131 opt Au proven and probable reserves; 22,318,000 tons, 0.050 opt Au mineral resource 2005: 114,512,000 tons, 0.128 opt Au (proven and probable reserves); 21,115,000 tons, 0.050 opt Au (measured and indicated resource); 417,000 tons, 0.089 opt Au (inferred resource) 2006: 105,206,000 tons, 0.125 opt Au (proven and probable reserves); 20,184,000 tons, 0.050 opt Au (measured and indicated resource); 489,000 tons, 0.078 opt Au (inferred resource) 2007: 94,914,000 tons, 0.128 opt Au (proven and probable reserves); 34,532,000 tons, 0.052 opt Au (measured and indicated resource); 5,014,000 tons, 0.064 opt Au (inferred resource)	1974: 302,807 oz Au 1980-88: 440,000 oz Au 1989-92: 2,214,508 oz Au, 92,347 oz Ag 1993: 1,439,929 oz Au 1994-98: 8,920,871 oz Au, 372,403 oz Ag 1999: 1,130,094 oz Au, 65,804 oz Ag 2000: 1,646,640 oz Au, 52,000 oz Ag 2001: 1,549,975 oz Au, 261,261 oz Ag 2002: 1,409,984 oz Au, 135,716 oz Ag 2003: 1,559,401 oz Au, 115,473 oz Ag 2004: 1,381,315 oz Au, 130,609 oz Ag 2005: 1,514,320 oz Au, 114,248 oz Ag 2006: 1,432,698 oz Au, 121,032 oz Ag 2007: 1,215,447 oz Au, 140,923 oz Ag	Ordovician to Devonian chert, shale, siltstone, and impure carbonate rocks; in part, Vinini Formation	Eocene
Buckhorn property (Buckhorn district)	1984: 5 million tons, 0.044 opt Au, 0.585 opt Ag 1990: 700,000 tons, 0.05 opt Au; <i>geologic resource</i> -200,350 oz Au 1993: <i>geologic resource</i> -1.1 million tons, 0.11 opt Au	1988-93: 109,422 oz Au, 409,887 oz Ag	basaltic andesite, sinter, silicified sedimentary rocks	14.6 Ma
Buckhorn South/ Zeke deposit (Buckhorn district)	1989: 2 million tons, 0.056 opt Au, 0.224 opt Ag 1998: 2.4 million tons, 0.046 opt Au		lower Paleozoic rocks	
Carlin North, Newmont (Lynn district)				
Blue Star	1987: 1.95 million tons, 0.066 opt Au 1989: <i>geologic resource</i> -22.2 million tons, 0.030 opt Au	1974-84: intermittent 1988-2006: included in Newmont Gold production at the end of this section	lower Paleozoic sandy siltstone and carbonate rocks, granodiorite	Eocene
Bobcat	1988: <i>geologic resource</i> -17.7 million tons, 0.029 opt Au		lower Paleozoic rocks	Eocene
Bullion Monarch	1987: 1 million tons, 0.10 opt Au	1977-84: 17,779 oz Au	lower Paleozoic sedimentary rocks	Eocene

MAJOR PRECIOUS-METAL DEPOSITS, EUREKA COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Deep Star	1996: 1.4 million tons, 0.8765 opt Au proven and probable reserves	1995: 2,800 oz Au 1996: 93,400 oz Au 1997-2005: included in Newmont Gold production at the end of this section	Popovich Formation	Eocene
Genesis	1989: <i>geologic resource</i> -35.8 million tons, 0.044 opt Au 1990: 32 million tons, 0.047 opt (includes Blue Star) 2004: 1,065,000 oz Au (proven and probable reserves)	1986: production commenced 1988-2006: included in Newmont Gold production at the end of this section	Ordovician-Devonian limestone, argillite, chert	Eocene
Genesis/North Star	1996: 22.7 million tons, 0.034 opt Au proven and probable reserves; 11 million	1994-95: 684,600 oz Au 1996-2006: included in Newmont Gold production at the end of this section	Ordovician-Devonian limestone, argillite, chert	Eocene
Genesis Complex	2000: 14.1 million tons, 0.026 opt Au proven and probable open-pit reserves 2004: 1,065,000 oz Au (proven and probable reserves) 2005: 1,193,058 oz Au (proven and probable reserves)			
Leeville	2004: 2,612,000 oz Au (proven and probable reserves) 2005: 2,433,000 oz Au (proven and probable reserves)	2005-2006: included in Newmont Gold production at the end of this section	Roberts Mountains Formation	Eocene
North Lantern	2004: 199,940 oz Au			
North Star	1989: <i>geologic resource</i> -6.9 million tons, 0.052 opt Au 1990: 3.9 million tons, 0.052 opt Au	1988: 4,250 oz Au 1989-2005: included in Newmont Gold production at the end of this section	lower Paleozoic sedimentary rocks	Eocene
Post/Goldbug	1996: 25.6 million tons, 0.190 opt Au proven and probable reserves; 43.6 million tons, 0.079 opt Au mineralized material	1999-2005: included in Newmont Gold production at the end of this section	lower Paleozoic sedimentary rocks	Eocene
Deep Post	2000: 3.1 million tons, 0.814 opt Au proven and probable underground reserves 2004 (includes Deep Star) 1,462,000 oz Au (proven and probable reserves) 2005 (includes Deep Star) 942,000 oz Au (proven and probable reserves)	2005-2006: included in Newmont Gold production at the end of this section		
Turf	1996: 2.5 million tons, 0.367 opt Au mineralized material	included in Newmont Gold production at the end of this section	Roberts Mountains Formation	Eocene
West Leeville (Newmont)	1996: 2 million tons, 0.377 opt Au proven and probable reserves; 581,000 tons 0.354 opt Au mineralized material	1995-96: 272,000 oz Au 1997-2000: included in Newmont Gold production at the end of this section	Roberts Mountains Formation	Eocene
West Leeville (Newmont-Barrick)	1996: 7.1 million tons, 0.425 opt Au proven and probable reserves; 500,000 tons 0.328 opt Au mineralized material		Roberts Mountains Formation	Eocene
Carlin Mine	1965: 11 million tons, 0.32 opt Au	1965-86: 3.8 million oz Au		
Carlin/Pete/Lantern	1995: 14.8 million tons, 0.031 opt Au 1996: 13.7 million tons, 0.046 opt Au proven and probable reserves; 14.7 million tons, 0.046 opt Au mineralized material 2004: 940,040 oz Au (proven and probable reserves) 2005: 1,044,841 oz Au (proven and probable reserves)	1994-96: 68,700 oz Au 1997-2006: included in Newmont Gold production at the end of this section	Roberts Mountains Formation	Eocene
Carlin Underground	2004: 163,000 oz Au 2005: 123,000 oz Au (proven and probable reserves)			
Carlin North-other	2000: 19.8 million tons, 0.052 opt Au, proven and probable open-pit reserves			

MAJOR PRECIOUS-METAL DEPOSITS, EUREKA COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Carlin North area total	2000: 8.2 million tons, 0.495 opt Au, proven and probable underground reserves			
Carlin North area, total open-pit	2001: 32.6 million tons, 0.044 opt Au, proven and probable reserves; 13.0 million tons, 0.039 opt Au mineralized material			
Carlin North area, total underground	2001: 10.9 million tons, 0.56 opt Au, proven and probable reserves; 2.1 million tons, 0.55 opt Au mineralized material			
Carlin South, Newmont (Maggie Creek district)				
Gold Quarry/Mac/Tusc	1982: 25.1 million tons, 0.106 opt Au and 150 million tons, 0.036 opt Au 1987: 197.8 million tons, 0.042 opt Au 1990: 212.6 million tons, 0.042 opt Au, <i>geologic resource</i> -534.3 million tons, 0.037 opt Au 1996: 174.8 million tons, 0.046 opt Au proven and probable reserves; 51.9 million tons, 0.058 opt Au mineralized material 2004: 5,984,000 oz (proven and probable reserves) 2005: 6,554,297 oz (proven and probable reserves)	1981: 6,000 oz Au 1982: 19,000 oz Au 1983: 74,000 oz Au 1984: 68,200 oz Au 1985: 136,200 oz Au 1986: 309,800 oz Au 1987: 446,600 oz Au 1988-93: included in Newmont Gold production 1994-96: 2,978,000 oz Au 1997-2007: included in Newmont Gold production at the end of this section	Ordovician to Devonian chert, shale, siltstone, and impure carbonate rocks; in part, Vinini Formation	Eocene
Mike	1999: 408,000,00 tons, .006 opt Au 151,000,000 tons, 0.10 % Cu 19,000,000 tons, 1.00 % Zn (drill-indicated mineral inventory)			
Tusc	1988: <i>geologic resource</i> -15.8 million tons, 0.059 opt Au 1990: 13.3 million tons, 0.062 opt Au	included in Newmont Gold production at the end of this section	lower Paleozoic sedimentary rocks	Eocene
Carlin South area	2000: 75.2 million tons, 0.059 opt Au proven and probable open-pit reserves			
Carlin South open-pit	2001: 61.3 million tons, 0.062 opt Au proven and probable reserves; 24.6 million tons, 0.028 opt Au mineralized material			
Chukar Footwall underground	2001: 278,000 tons, 0.49 opt Au proven and probable reserves; 115,000 tons, 0.46 opt Au mineralized material 2004: 172,000 oz Au (proven and probable reserves) 2005: 256,000 oz Au (proven and probable reserves)			
Carlin North and South combined (includes all Newmont's Carlin properties)				
Carlin open pit	2002: 181.8 million tons, 0.042 opt Au proven and probable reserves; 9.5 million tons, 0.028 opt Au measured and indicated mineralized material; 9.3 million tons, 0.035 opt Au inferred mineralized material 2003: 17,500,000 tons, 0.052 opt Au proven reserves 203,300,000 tons, 0.044 probable reserves 1,000,000 tons 0.035 measured material; 11,200,000 tons 0.024 indicated material; 10,400,000 tons 0.034 opt Au inferred material 2004: 201,600,000 tons, 0.047 opt Au proven and probable reserves; 13,200,000 tons, 0.022 opt Au indicated material; 7,700,000 tons, 0.034 opt Au inferred material 2005: 238.3 million tons, 0.043 opt Au (proven and probable reserves); 28.1 million tons, 0.04 opt Au (measured and indicated resource); 4.2 million tons, 0.024 opt Au (inferred resource) 2006: 271.6 million tons, 0.042 opt Au (proven and probable reserves); 35.1 million tons, 0.035 opt Au (measured and indicated resource); 6.3 million tons, 0.022 opt Au (inferred resource)	2004-2006: included in Newmont Gold production at the end of this section		Eocene

MAJOR PRECIOUS-METAL DEPOSITS, EUREKA COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
	2007: 213.5 million tons, 0.045 opt Au (proven and probable reserves); 14.6 million tons, 0.020 opt Au (measured and indicated resource); 3.7 million tons, 0.037 opt Au (inferred resource)			
Carlin underground	2002: 10 million tons, 0.57 opt Au proven and probable reserves; 2.6 million tons, 0.50 opt Au measured and indicated mineralized material; 200,000 tons, 0.53 opt Au inferred mineralized material 2003: 2,700,000 tons, 0.670 opt Au proven reserves; 6,100,000 tons, 0.500 opt Au probable reserves; 3,700,000 tons 0.480 opt Au inferred material 2004: 8,700,000 tons, 0.510 opt Au proven and probable reserves; 100,000 tons, 0.260 opt Au indicated material; 3,900,000 tons, 0.470 opt Au inferred material 2005: 7.7 million tons, 0.49 opt Au (proven and probable reserves); 300,000 tons, 0.33 opt Au (measured and indicated resource); 3.7 million tons, 0.46 opt Au (inferred resource) 2006: 7.4 million tons, 0.44 opt Au (proven and probable reserves); 1.1 million tons, 0.28 opt Au (measured and indicated resource); 3.0 million tons, 0.47 opt Au (inferred resource) 2007: 7.2 million tons, 0.388 opt Au (proven and probable reserves); 110,000 tons, 0.482 opt Au (measured and indicated resource); 2.6 million tons, 0.480 opt Au (inferred resource)	2004-2006: included in Newmont Gold gold production at the end of this section		Eocene
Gold Bar (Antelope district)	1984: 2.8 million tons, 0.09 opt Au 1990: mined out in December 1994: 240,000 oz Au 1995: 190,000 oz Au 2001: 473,000 oz Au in 6 deposits 2002: 3.6 million tons, 0.100 opt Au resource	1987-90: 238,262 oz Au 1991: 80,727 oz Au, 3,000 oz Ag 1992-94: 155,080 oz Au	Devonian Nevada Formation	Eocene?
Gold Canyon (Antelope district)	1992: reserves-86,500 oz Au, <i>geologic resource</i> -131,000 oz Au 1993: 770,000 tons, 0.080 opt Au 2001: <i>see</i> Gold Bar 2002: 2.5 million tons, 0.056 opt Au resource	reported with Gold Bar	Devonian Upper Denay Limestone Formation	Eocene?
Gold Pick (Antelope district)	1988: 10 million tons, 0.06 opt Au 1993: 1.4 million tons, 0.079 opt Au 2001: <i>see</i> Gold Bar 2002: 5 million tons, 0.057 opt Au measured mineral resource 2005: 7,874,000 tons, 0.041 opt Au (indicated resource)	reported with Gold Bar	Devonian McColley Canyon Formation	Eocene?
Gold Ridge (Antelope district)	1988: 4 million tons, 0.06 opt Au 1993: 426,000 tons, 0.059 opt Au 2001: <i>see</i> Gold Bar 2002: 584,164 tons, 0.046 opt Au resource	reported with Gold Bar	Devonian McColley Canyon Formation	Eocene?
Goldstone (Antelope district)	1988: 1.7 million tons, 0.08 opt Au 1993: 130,928 tons, 0.104 opt Au 2001: <i>see</i> Gold Bar	reported with Gold Bar	Devonian Upper Denay Limestone Formation	Eocene?
Horse Canyon (Cortez district)	1984: 3.94 million tons, 0.055 opt Au 1988: included in Cortez Joint Venture figures	1984: 40,000 oz Au 1988-93: included with Cortez Joint Venture	Wenban Limestone	35 Ma?
Ratto Canyon (Lookout Mountain) (Eureka district)	1984: ~200,000 oz Au (entire Ratto Ridge area); 2006: 836,000 tons, 0.24 opt Au (measured and indicated resource)	1987-88: 17,000 oz Au	Dunderberg Shale, Hamburg Dolomite	Eocene
Rock Creek (Eureka-Lander Co. line)	1997: 800,000 tons, 0.045 opt Au		Tertiary latite tuff	

MAJOR PRECIOUS-METAL DEPOSITS, EUREKA COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Rodeo Projects (Rodeo, Griffin, Goldbug, North Betze) (Lynn district)	1998: 2.9 million tons, 0.487 opt Au proven and probable reserves; 5.8 million tons, 0.302 opt Au mineralized material 1999: 5.8 million tons, 0.466 opt Au, proven and probable reserves; 13.0 million tons, 0.270 opt Au mineralized material 2000: 9.2 million tons, 0.414 opt Au proven and probable; 7.4 million tons, 0.333 opt Au mineral resource 2005-2006: reserves are combined with Meikle reserves	included with Meikle production, Elko County		Eocene
Ruby Hill (Eureka district)	1994: <i>geologic resource</i> -20 million tons, 0.08 opt Au 1995: 7.62 million tons, 0.099 opt Au 1999: 3.77 million tons, 0.110 opt Au proven and probable; 7.33 million tons, 0.072 opt Au mineralized material 2000: 2.7 million tons, 0.105 opt Au proven and probable reserves; 7.3 million tons, 0.072 opt Au mineralized material 2004: (East Archimedes) 17,093,000 tons, 0.059 opt Au proven and probable reserves; 3,049,000 tons, 0.061 opt Au mineral resource 2006: (East Archimedes) 19,479,000 tons, 0.055 opt Au (proven and probable reserves); 601,000 tons, 0.088 opt Au (measured and indicated resource) 2007: (East Archimedes) 18,763,000 tons, 0.055 opt Au (proven and probable reserves); 3,202,000 tons, 0.076 opt Au (measured and indicated resource); 6,000 tons, 0.333 opt Au, (inferred resource)	1997-98: 133,100 oz Au, 8,686 oz Ag 2000: 125,193 oz Au, 7,984 oz Ag 1999: 123,841 oz Au, 7,688 oz Ag 2001: 134,737 oz Au, 9,315 oz Ag 2002: 135,448 oz Au, 9,750 oz Ag 2003: 18,134 oz Au, 2,441 oz Ag 2004: 6,057 oz Au, 1,868 oz Ag 2007: 142,856 oz Au, 8,368 oz Ag	Goodwin Limestone	
Tonkin Springs (Antelope district)	1983: 1.84 million tons, 0.089 opt Au, 0.204 opt Ag 1987: <i>oxide</i> -1.5 million tons, 0.05 opt Au; <i>sulfide</i> -2.5 million tons, 0.09 opt Au 1991: 9 million tons, 0.05 opt Au 1999: 30.7 million tons, 0.045 opt Au resource 2006: 29,672,000 tons, 0.043 opt Au (measured and indicated resource); 3,466,000 tons, 0.044 opt Au, (inferred resource) 2008 (May): 35,584,000 tons, 0.041 opt Au (measured and indicated resource) 9,290,000 tons, 0.033 opt Au, (inferred resource)	1987-88: 10,265 oz Au 1989-90: 3,821 oz Au, 1,872 oz Ag	Vinini Formation	Eocene?
Windfall (Eureka district)	1988: 3 million tons, 0.03 opt Au 1995: mined out	1908-16: 24,000 oz Au 1975-84: 90,000 oz Au 1988: 6,380 oz Au, 59 oz Ag	Hamburg Dolomite	Eocene or Oligocene
HUMBOLDT COUNTY				
Adelaide Crown (Gold Run district)	1989: south pit-585,000 tons, 1.313 opt Ag, 0.043 opt Au; additional area: 165,000 tons, 0.015 opt Au, 1.10 opt Ag	1990-91: 4,917 oz Au, 53,474 oz Ag	Preble Formation	Tertiary
Ashdown (Vicksburg district)	1987: 1.16 million tons, 0.125 opt Au 1992: 1.1 million tons, 0.12 opt Au 2002: 100,000 oz Au		Mesozoic granite	Mesozoic
Buckskin (National district)	1997: 50,221 oz Au, 466,243 oz Ag estimated resource		Miocene rhyolite flows and flow breccias	16 Ma
Chimney Creek (Potosi district)	1988: proven, probable-26.9 million tons, 0.068 opt Au; inferred in south pit-2.1 million oz Au 1993: see Twin Creeks	1987-88: 300,000 oz Au 1989: 222,556 oz Au, 55,953 oz Ag 1990: 220,000 oz Au 1991-92: 476,034 oz Au, 213,463 oz Ag 1993: see Twin Creeks	upper Paleozoic sedimentary rocks	

MAJOR PRECIOUS-METAL DEPOSITS, HUMBOLDT COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Converse/Redline (Buffalo Valley district)	2003: 77,459,000 tons, 0.020 opt Au measured and indicated resource 2004: 263 million tons, 0.0150 opt Au, 0.0582 opt Ag (measured and indicated resource) 35 million tons, 0.0143 opt Au, 0.0524 opt Ag	granodiorite	Havallah Formation,	Tertiary
Getchell (Potosi district)	1989: 8.1 million tons, 0.154 opt Au mill grade and 1.43 million tons, 0.049 opt Au heap-leach ore; additional geologic resource: 5.7 million tons, 0.092 opt Au sulfide and 2.6 million tons, 0.055 opt Au oxide 1999: 18.1 million tons, 0.359 opt Au 2000: 2.8 million oz Au measured resource, 5.5 million oz Au indicated resource, and 6.7 million oz inferred resource 2002: 2.69 million oz Au proven and probable reserves; 1.51 million oz Au measured and indicated mineral resource 2003: (Turquoise Ridge) 6,000,000 tons, 0.570 opt Au proven reserves; 2,400,000 tons, 0.620 opt Au probable reserves; 4,400,000 tons, 0.300 opt Au measured material; 2,800,000 tons, 0.400 opt Au indicated material; 4,800,000 tons, 0.490 opt Au inferred material 2005: Turquoise Ridge Mine (included Turquoise Ridge and Getchell Footwall deposits) 7.6 million tons, 0.56 opt Au (proven and probable reserves); 5.6 million tons, 0.42 opt Au (measured and indicated resource); 400,000 tons, 0.54 opt (inferred resource) 2006: Turquoise Ridge Mine (included Turquoise Ridge and Getchell Footwall deposits) 8.436 million tons, 0.544 opt Au (proven and probable reserves); 4.801 million tons, 0.432 opt Au (measured and indicated resource); 1.961 million tons, 0.493 opt (inferred resource) 2007: Turquoise Ridge Mine (included Turquoise Ridge and Getchell Footwall deposits) 11.239 million tons, 0.458 opt Au (proven and probable reserves); 3.291 million tons, 0.409 opt Au (measured and indicated resource); 2.000 million tons, 0.444 opt (inferred resource)	1938-50, 1962-67: 788,875 oz Au 1987-88: ~35,000 oz Au 1989: 120,730 oz Au, 9,407 oz Ag 1990-91: 372,987 oz Au 1992-95: 790,600 oz Au, 258,700 oz Ag 1996-97: 348,517 oz Au 1998: 175,302 oz Au, 52,490 oz Ag 1999: 111,000 oz Au 2002: 54,600 oz Au, 5,400 oz Ag 2003: 93,337 oz Au 2004: 162,637 oz Au 2005: 208,492 oz Au, 54,419 oz Ag 2006: 233,127 oz Au, 30,473 oz Ag 2007: 251,133 oz Au	Comus and Preble Formations, dikes, granodiorite	37-41 Ma
Hycroft formerly Crofoot/Lewis (Sulphur district)	1988: 25 million tons, 0.025 opt Au 1999: 23.8 million tons, 0.0204 opt Au proven and probable reserves; 2.3 million tons, 0.0177 opt Au indicated reserves 2000: 41.9 million tons, 0.0196 opt Au measured and indicated resource; 14.1 million tons, 0.0152 opt Au inferred resource 2004: 47,479,000 tons, 0.016 opt Au measured and indicated; 12,029,000 tons, 0.011 opt Au inferred resource 2005: 33.32 million tons, 0.02 opt Au (proven and probable reserves) 52.7 million tons, 0.019 opt Au (measured and indicated resource) 8.7 million tons, 0.015 opt Au (inferred resource) 2007: 33.320 million tons, 0.020 opt Au (proven and probable reserves, January 2008); 19.780 million tons, 0.018 opt Au (measured and indicated resource, January 2008); 283.392 million tons, 0.019 opt Au (inferred resource, May 2008)	1988: 75,800 oz Au 1989-98: 868,544 oz Au, 2,717,170 oz Ag 1999: 40,075 oz Au, 183,190 oz Ag 2000: 13,493 oz Au, 38,418 oz Ag 2001: 3,232 oz Au, 2,000 Ag 2002: 1,771 oz Au, 217 oz Ag 2003: 644 oz Au, 100 oz Ag 2004: 61 oz Au	Camel conglomerate, rhyolite dikes	1-2 Ma
Lone Tree (Buffalo Mountain district)	1990: 5.4 million tons oxide mill ore, 0.159 opt Au, 5.7 million tons heap-leach ore, 0.025 opt Au and 1.2 million oz Au in sulfide ore 1994: 4 million oz Au 2000: 40.8 million tons, 0.060 opt Au proven and probable reserves (Lone Tree Complex) 2001: 29.2 million tons, 0.065 opt Au proven and probable reserves; 7.9 million tons, 0.032 opt Au mineralized material	1991-99: 546,335 oz Au 1995: 240,000 oz Au, 11,000 oz Ag 1996-97: 536,820 oz Au 1998: 257,702 oz Au, 27,484 oz Ag 1999: 191,975 oz Au, 35,617 oz Ag 2000: 281,022 oz Au, 38,346 oz Ag	Havallah Formation, Antler sequence, and dacite porphyry	38 Ma

MAJOR PRECIOUS-METAL DEPOSITS, HUMBOLDT COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
	2002: 21 million tons, 0.069 opt Au proven and probable reserves; 2 million tons, 0.057 opt Au measured and indicated mineralized material; 1 million tons, 0.047 opt Au inferred mineralized material 2003: 3,300,000 tons, 0.092 opt Au proven reserves; 13,000,000 tons, 0.084 opt Au probable reserves; 2,100,000 tons, 0.054 opt Au indicated material; 600,000 tons, 0.054 opt Au inferred material 2004: 14,000,000 tons, 0.063 opt Au proven And probable reserves; 3,400,000 tons, 0.044 opt Au indicated material; 200,000 tons, 0.116 opt Au inferred material 2005: 4 million tons, 0.080 opt Au (proven and probable reserves); 3 million tons, 0.032 opt Au (measured and indicated resource); 2007: 4.200 million tons, 0.022 opt Au (measured and indicated resource)	2001: 260,518 oz Au, 29,974 oz Ag 2002: 327,160 oz Au, 65,905 oz Ag 2003: 434,704 oz Au, 80,094 oz Ag 2004: 497,065 oz Au, 140,144 oz Ag 2005: 339,187 oz Au, 46,934 oz Ag 2006: 357,787 oz Au, 26,601 oz Ag 2007: 182,768 oz Au, 37,172 oz Ag		
Marigold (Battle Mountain district)	1987: 8 million tons, 0.0935 opt Au 1990: 4.3 million tons, 0.105 opt Au mill ore, 7.6 million tons, 0.026 opt Au heap-leach ore 1999: 19.09 million tons, 0.032 opt Au 2000: 30.2 million tons, 0.035 opt Au proven and probable reserves; 20.7 million tons, 0.029 opt Au measured and indicated resource 2001: 75.5 million tons, 0.027 opt Au proven and probable reserves; 109.9 million tons, 0.014 opt Au measured and indicated resource 2002: 79.1 million tons, 0.026 opt Au proven and probable reserves; 129.7 million tons, 0.014 opt Au mineral resource 2003: 9,366,000 tons, 0.031 opt Au proven reserves; 83,909,000 tons, 0.023 opt Au probable reserves; 19,937,000 tons, 0.020 opt Au measured reserves; 20,069,000 tons, 0.020 opt Au indicated resource; 177,450,000 tons, 0.014 opt Au inferred resource 2004: 71,218,500 tons, 0.023 opt Au proven and probable reserves; 18,043,500 tons, 0.022 opt Au measured and indicated resource; 21,000,000 tons, 0.014 opt Au inferred resource 2005: 98.21 million tons, 0.021 opt Au (proven and probable reserves); 157.48 million tons, 0.020 opt Au (measured and indicated resource, includes reserves); 163.23 million tons, 0.013 opt Au (inferred resource) 2006: 102.87 million tons, 0.021 opt Au (proven and probable reserves); 94.587 million tons, 0.018 opt Au (measured and indicated resource); 88.212 million tons, 0.011 opt Au (inferred resource) 2007: 84.66 million tons, 0.020 opt Au (proven and probable reserves); 46.41 million tons, 0.020 opt Au (measured and indicated resource); 122.53 million tons, 0.013 opt Au (inferred resource)	1989-93: 322,219 oz Au, 9,784 oz Ag 1994-98: 363,771 oz Au 1999: 74,000 oz Au 2000: 68,000 oz Au 2001: 84,784 oz Au, 401 oz Ag 2002: 83,321 oz Au, 1,281 oz Ag 2003: 142,100 oz Au, 2,080 oz Ag 2004: 141,304 oz Au, 2,354 oz Ag 2005: 205,663 oz Au, 1,723 oz Ag 2006: 149,805 oz Au, 1,986 oz Ag 2007: 140,840 oz Au, 2,233 oz Ag	Paleozoic chert, argillite, and carbonate rocks	
North Stonehouse (Buffalo Mountain district)	1991: 2.5 million tons, 0.103 oz Au mill ore		Havallah Formation and porphyry dikes	39 Ma
Pinson (Potosi district)	1980: 3.245 million tons, 0.119 opt Au 1989: 480,000 oz Au 1996: 2.6 million tons, 0.072 opt Au 2005: 1,692,000 tons, 0.421 opt Au (measured and indicated resource) 3,097,000 tons, 0.34 opt Au (inferred resource) 2006: (includes Range Front, Ogee and CX-West zones) 2,505,000 tons, 0.454 opt Au (measured and indicated resource) 3,374,500 tons, 0.340 opt Au (inferred resource)	1980: 56,000 oz Au 1986-88: 189,864 oz Au 1989: 72,489 oz Au (includes Preble) 1990-91: 112,022 oz Au 1992-94: 145,210 oz Au, 12,700 oz Ag 1995: 44,854 oz Au 1996-98: 128,935 oz Au, 7,990 oz Ag 1999: 11,975 oz Au, 442 oz Ag 2000: 1,116 oz Au, 31 oz Ag 2001: 679 oz Au	Comus Formation	Eocene?

MAJOR PRECIOUS-METAL DEPOSITS, HUMBOLDT COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Preble (Potosi district)	1985: 1.8 million tons, 0.062 opt Au 1986: 3.16 million tons, 0.093 opt Au heap leach, 80,000 tons, 0.242 opt Au mill grade 1989: 15,110 oz Au	1985: 17,000 oz Au 1987: 28,000 oz Au 1988: 18,828 oz Au 1989: included with Pinson 1990: 1,161 oz Au	Preble Formation	Eocene?
Rabbit Creek (Potosi district)	1989: 4.1 million oz Au; additional geologic <i>resource</i> -1 million Au in refractory material 1992: reserves-3.26 million oz Au 1993: <i>see</i> Twin Creeks	1990-92: 296,000 oz Au 1993: <i>see</i> Twin Creeks, p. 51	Ordovician	Eocene?
Sandman (Tenmile district)	2007: 8.033 million tons, 0.034 opt Au (measured and indicated resource) 1,418,000 million tons, 0.027 opt Au (inferred resource)			
Sleeper (Awakening district)	1985: 4.2 million tons, 0.13 opt Au, 0.73 opt Ag 1989: 1,975,000 oz Au 1990: 44.1 million tons, 0.038 opt Au, 0.152 opt Ag 1999: 2.1 million oz Au at average grade of 0.025 opt Au; 18.1 million oz Ag at average grade of 0.208 opt Ag	1986: 128,000 oz Au, 94,000 oz Ag 1987-88: 389,106 oz Au 1989-96: 1,149,054 oz Au, 1,838,791 oz Ag 2001: 90 oz Au, 197 oz Ag 2002: 130 oz Au, 263 oz Ag	Miocene "latite" flows and dikes, silicic ash-flow tuff, Triassic slate and phyllite	16.1 Ma
Trenton Canyon (includes Valmy and North Peak) (Buffalo Valley district)	1994 oxide resource: 14.6 million tons, 0.035 opt Au, (517,000 oz Au) 1999: 995,000 tons, 0.021 opt Au (North Peak); 10.8 million tons, 0.022 opt Au (Valmy)	2000: included with Lone Tree 2001: 24,228 oz Au, 2,996 oz Ag 2002: 3,685 oz Au, 742 oz Ag 2006: 1,937 oz Au, 38 oz Ag 2007: 1,768 oz Au, 360 oz Ag		
Trout Creek (Battle Mountain district)	1989: 50,000 oz Au			
Twin Creeks (Chimney and Rabbit Creeks) (Potosi district)	1993: 5.7 million oz Au 1999: 87.1 million tons, 0.079 opt Au proven and probable 2000: 75.2 million tons, 0.086 opt Au proven and probable 2002: 47.6 million tons, 0.081 opt Au proven and probable reserves; 55 million tons, 0.057 opt Au measured and indicated mineralized material; 1.8 million tons, 0.046 opt Au inferred mineralized material 2003: 14,000,000 tons, 0.085 opt Au proven reserves; 48,200,000 tons, 0.074 opt Au probable reserves; 8,000,000 tons, 0.051 opt Au measured material; 34,800,000 tons, 0.051 opt Au indicated material; 1,700,000 tons, 0.041 opt Au inferred material; 2004: 61,800,000 tons, 0.075 opt Au proven and probable reserves; 15,300,000 tons, 0.077 opt Au indicated material; 800,000 tons, 0.043 opt Au inferred material 2005: 61.2 million tons, 0.074 opt Au (proven and probable reserves); 19.9 million tons, 0.049 opt Au (measured and indicated resource); 3.1 million tons, 0.033 opt Au (inferred resource) 2006: 64.8 million tons, 0.077 opt Au (proven and probable reserves); 25.0 million tons, 0.058 opt Au (measured and indicated resource); 3.1 million tons, 0.033 opt Au (inferred resource) 2007: 52.1 million tons, 0.078 opt Au (proven and probable reserves); 21.0 million tons, 0.063 opt Au (measured and indicated resource); 2.6 million tons, 0.030 opt Au (inferred resource)	1993-98: 3,338,026 oz Au, 1,317,456 oz Ag 1999: 879,453 oz Au, 119,191 oz Ag 2000: 779,075 oz Au, 103,909 oz Ag 2001: 831,962 oz Au, 95,721 oz Ag 2002: 786,313 oz Au, 158,401 oz Ag 2003: 697,607 oz Au, 128,535 oz Ag 2004: 352,810 oz Au, 99,472 oz Ag 2005: 267,620 oz Au, 144,172 oz Ag 2006: 354,484 oz Au, 43,467 oz Ag 2007: 488,457 oz Au, 99,344 oz Ag	Paleozoic	41-43 Ma
Winnemucca Mountain (Winnemucca district)	1998: 130,000 to 140,000 oz Au proven, 300,000 oz Au indicated			

MAJOR PRECIOUS-METAL DEPOSITS (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
LANDER COUNTY				
Austin Gold Venture (Birch Creek district)	1986: 1.75 million tons, 0.16 opt Au 1989: mined out 1999: 154,000 oz Au resource	1986-88: 141,000 oz Au 1989: 50,000 oz Au	Antelope Valley Limestone	Cretaceous or Tertiary
Battle Mountain Complex (Battle Mountain district)	1992: 500,000 oz Au 1995: resource (overall Battle Mountain complex)-60.2 million tons, 0.036 opt Au, including reserves-46.6 million tons, 0.040 opt Au 1999 (Phoenix): 5,680,000 oz Au proven and probable; 1.5 million oz Au additional mineralization 2000: 175.2 million tons, 0.034 opt Au proven and probable reserves	1994-98: 274,741 oz Au, 632,739 oz Ag 1999: 8,322 oz Au, 19,526 oz Ag 2000: 1,509 oz Au, 1,756 oz Ag 2001: see Phoenix		Eocene
Buffalo Valley Gold Project (Buffalo Valley district)	1988: 1.5 million tons, 0.05 opt Au 1994: 4.8 million tons, 0.07 opt Au 1997: 600,106 oz Au resource; 100,797 oz Au, other mineralized material	1988-90: 39,668 oz Au		Eocene?
Cortez Joint Venture (Bullion district) CJV includes original Cortez Mine, Pipeline, South Pipeline, Gold Acres, Cortez Hills	1968: 3.6 million tons, 0.279 opt Au (Cortez deposit) 1987: 4.8 million tons, 0.105 opt Au 1999: 189.4 million tons, 0.050 opt Au proven and probable; 119.1 million tons, 0.035 opt Au mineralized material 2000: 151.3 million tons, 0.047 opt Au proven and probable; 60.0 million tons, 0.047 opt Au mineralized material 2001: 191.1 million tons, 0.044 opt Au proven and probable; 76.6 million tons, 0.040 opt Au resource 2002: 229.3 million tons, 0.034 opt Au proven and probable reserves; 281.7 million tons, 0.025 opt Au measured and indicated mineral resource 2003: 88,131,000 tons, 0.061 opt Au proven reserves; 49,623,000 tons, 0.045 opt Au probable reserves; 44,617,000 tons, 0.046 opt Au measured resource; 130,580,000 tons, 0.027 opt Au indicated resource; 18,023,000 tons, 0.047 opt Au inferred resource 2004: 193,560,000 tons, 0.046 opt Au proven and probable reserves; 188,860,000 tons, 0.028 opt Au measured and indicated; 20,500,000 tons, 0.024 opt Au inferred resource 2005 (Sept 1): 275.8 million tons, 0.040 opt Au (proven and probable reserves); 309 million tons, 0.033 opt Au (measured and indicated resource); 39.2 million tons, 0.058 opt Au (inferred resource) 2006: 184.0 million tons, 0.061 opt Au (proven and probable reserves); 44.47 million tons, 0.041 opt Au (measured and indicated resource); 6.54 million tons, 0.131 opt Au (inferred resource) 2007: 144.09 million tons, 0.080 opt Au (proven and probable reserves); 76.24 million tons, 0.045 opt Au (measured and indicated resource); 19.34 million tons, 0.153 opt Au (inferred resource)	1942-84: 2.4 million tons, 0.13 opt Au; 2 million tons, 0.041 opt Au leached. Little Gold Acres: 800,000 tons, 0.124 opt Au 1988: 42,322 oz Au (includes Horse Canyon) 1989: 39,993 oz Au, 12,234 oz Ag (includes Horse Canyon) 1990-91: 107,445 oz Au, 16,750 oz Ag 1992-93: 141,850 oz Au 1995-98: 1,817,273 oz Au, 31,332 oz Ag 1999: 1,328,525 oz Au 2000: 1,009,992 oz Au 2001: 1,184,732 oz Au 2002: 1,081,677 oz Au 2003: 1,065,402 oz Au 2004: 1,051,197 oz Au 2005: 915,889 oz Au, 52,160 oz Ag 2006: 408,255 oz Au, 25,065 oz Ag 2007: 534,173 oz Au, 47,240 oz Ag	Roberts Mountains Formation, Wenban Limestone, Valmy Formation, quartz porphyry dikes	
Cortez Hills	2005 (Sept 1): 71.3 million tons, 0.079 opt Au, 5,545,000 oz Au (proven and probable reserves); 5.75 million tons, 0.42 opt Au, 2,421,667 oz Au (measured and indicated resource, underground); 13.8 million tons, 0.13 opt Au, 1,856,667 oz Au (inferred resource, open pit and underground) 2006: 8.5 million oz Au (proven and probable reserves)			
Crescent Pit	1994: 1.97 million tons mill grade, 0.125 opt Au, 2.2 million tons heap-leach, 0.029 opt Au 1997: included in Cortez Joint Venture			

MAJOR PRECIOUS-METAL DEPOSITS, LANDER COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Crescent Valley (Bullion district)	1994: placer reserves-8 million cu yd, 0.031 oz Au/cu yd 1995: placer resource-6 million cu yd, 0.03 oz Au/cu yd			
Dean (Lewis district)	1995: proven reserves-11,000 oz Au possible to probable resource-240,000 oz Au			
Elder Creek Project/Shoshone (Lewis district)	1989: 91,500 oz Au 1990: 1.5 million tons, 0.041 opt Au	1990-91: 20,102 oz Au	Valmy Formation	Cretaceous or Eocene
Fire Creek (northeast of Bullion district)	1982: 350,000 tons, 0.06 opt Au 2005 (May): 1,779,196 tons, 0.328 opt Au (indicated resource) 2006: 1,961,195 tons, 0.576 opt Au (indicated resource)	1983-84: 767 oz Au	basaltic andesite	Miocene
Fortitude Complex (Battle Mountain district)	1984: 16 million tons, 0.15 opt Au, 0.57 opt Ag	1986: 253,000 oz Au, 902,000 oz Ag 1987: 255,000 oz Au 1988-93: 985,616 oz Au, 1,707,992 oz Ag (includes Surprise) 1994: 50,000 oz Au, 95,000 Ag (Reona Mine) 1995: see Battle Mountain Complex 2001: see Phoenix	Battle Formation, Antler Peak Limestone Pumpnickel Formation	37 Ma
Fortitude Extension (Battle Mountain district)	1992: 500,000 oz Au 1993: <i>geologic resource</i> -900,000 oz Au 1996: included in Battle Mountain Complex			
Hilltop (Hilltop district)	1984: 10.3 million tons, 0.073 opt Au 1989: 10 million tons, 0.049 opt Au 2005: 121 million tons, 0.019 opt Au (measured and indicated resource)		Valmy Formation	Oligocene?
Klondike property	1989: 100,000 oz Au equivalent			
McCoy/Cove (McCoy district)	1981: 2.5 million tons, 0.08 opt Au, 1 opt Ag (McCoy) 1987: 14 million tons, 0.05 opt Au (McCoy); 4 million oz Au, 250 million oz Ag (Cove) 1989: proven and probable reserves 2.9 million oz Au, 128 million oz Ag <i>geologic resource</i> -3.5 million oz Au, 1.50 million oz Ag 1999: 11.8 million tons, 0.043 opt Au, 2.387 opt Ag proven and probable reserves; 100,000 tons, 0.350 opt Au, 2.0 opt Ag other mineralization 2000: 4.7 million tons, 0.034 opt Au, 2.309 opt Ag proven and probable reserves 2001: 430,000 tons, 0.031 opt Au, 2.624 opt Ag proven and probable reserves	1986: 50,000 oz Au 1987-98: 3,046,660 oz Au, 85.79 million oz Ag 1999: 124,500 oz Au, 8.43 million oz Ag 2000: 162,784 oz Au, 12,328,297 oz Ag 2001: 94,633 oz Au 6,451,425 oz Ag 2002: 33,142 oz Au, 1,987,421 oz Ag 2003: 4,699 oz Au, 706 oz Ag 2004: 8,454 oz Au, 64,335 oz Ag 2005: 2,740 oz Au, 776 oz Ag 2006: 2,939 oz Au, 596 oz Ag	Panther Canyon Formation (conglomerate, sandstone), Augusta Mountain Formation (limestone), granodiorite	39.5 Ma
Mud Springs (Bald Mtn. Zone) (Bullion district)	1993: <i>geologic resource</i> -42,000 oz Au			
Mule Canyon (Argenta district)	1992: 8.5 million tons, 0.136 opt Au 1996: 9 million tons, 0.112 opt Au	1996: 6,743 oz Au 1999: 55,392 oz Au, 10,022 oz Ag 2000: 40,027 oz Au, 5,856 oz Ag	basalt and basaltic andesite	15-16 Ma

MAJOR PRECIOUS-METAL DEPOSITS, LANDER COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
		2001: 33,616 oz Au, 3,100 oz Ag 2002: 13,444 oz Au, 2,708 oz Ag 2003: 8,086 oz Au, 1,490 oz Ag 2004: 2,289 oz Au, 645 oz Ag 2005: 47,896 oz Au, 5,449 oz Ag 2006: 30,732 oz Au, 3,248 oz Ag 2007: 22,466 oz Au, 4,565 oz Ag		
Phoenix (Battle Mountain district)	2001: 174.2 million tons, 0.034 opt Au proven and probable reserves; 156.3 million tons, 0.17% Cu proven and probable reserves; 73.8 million tons, 0.026 opt Au mineralized material; 99.6 million tons, 0.14% Cu mineralized material 2002: 174.2 million tons, 0.034 opt Au probable reserves; 156.3 million tons, 0.16 % Cu probable reserves; 1.5 million tons, 0.033 opt Au measured and indicated mineralized material; 72.3 million tons, 0.026 opt Au inferred mineralized material; 63.5 million tons, 0.14 % Cu inferred mineralized material 2003: 175,700,000 tons, 0.035 opt Au probable reserves; 94,700,000 tons, 0.022 opt Au indicated material; 18,900,000 tons, 0.029 opt Au inferred material; 85,200 tons, 0.12% Cu indicated material; 14,300 tons, 0.11% Cu inferred material 2004: 248,000,000 tons, 0.034 opt Au proven and probable reserves; 33,900,000 tons, 0.022 opt Au indicated material; 34,900,000 tons, 0.028 opt Au inferred material; 216,700,000 tons, 0.15% Cu probable; 32,000,000 tons, 0.21% Cu indicated; 29,800,000 tons, 0.17% Cu inferred 2005: 308.4 million tons, 0.029 opt Au (proven and probable reserves); 22.2 million tons, 0.023 opt Au (measured and indicated resource); 16.5 million tons, 0.026 opt Au (inferred resource) 2006: 295.2 million tons, 0.027 opt Au (proven and probable reserves); 92.8 million tons, 0.017 opt Au (measured and indicated resource) 23.2 million tons, 0.022 opt Au (inferred resource) 2007: 278.1 million tons, 0.027 opt Au (proven and probable reserves); 92.8 million tons, 0.017 opt Au (measured and indicated resource); 22.9 million tons, 0.022 opt Au (inferred resource)	2001: 5,641 oz Au, 6,468 oz Ag 2002: 6,134 oz Au, 1,236 oz Ag 2003: 5,444 oz Au, 1,003 oz Ag 2004: 7,887 oz Au, 2,224 oz Ag 2005: 6,406 oz Au, 1,156 oz Ag 2006: 67,394 oz Au, 38,112 oz Ag, 6,235,096 lbs Cu 2007: 181,313 oz Au, 664,787 oz Ag, 10,808,206 lbs Cu		Eocene
Pipeline (Bullion district)	1991: <i>geologic resource</i> -11.3 million tons, 0.237 opt Au 1996: 136.7 million tons, 8.7 million oz Au measured resource, includes South Pipeline 1997: included in Cortez Joint Venture	included in Cortez Joint Venture	Roberts Mountains Formation	Eocene?
Robertson (Bullion district)	1988: 11 million tons, 0.04 opt Au 1999: Porphyry zone, 254,678 oz Au proven and probable reserves; Lucky Boy, 33,000 oz Au measured; Altenburg Hill, 21,300 oz Au measured; Widows Mine, 37,300 oz Au inferred; Gold Pan, 91,400 oz Au measured 2005-2006: 22.9 million tons, 0.031 opt Au (measured and indicated resource) 9,408,000 tons, 0.046 opt Au (inferred resource) 2007: 91.3 million tons, 0.025 opt Au (inferred resource)	1989: 3,700 oz Au	Valmy Formation	early Oligocene
Slaven Canyon property (Bateman Canyon district)	1994: 50,000 oz Au 2002: 1.6 million tons, 0.043 opt Au			

MAJOR PRECIOUS-METAL DEPOSITS, LANDER COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
South Pipeline (Bullion district)	1992: 9 million tons, 0.082 opt Au 1994: <i>geologic resource</i> -76.5 million tons, 0.048 opt Au 1996: <i>see</i> Pipeline 1997: included in Cortez Joint Venture		Roberts Mountains Formation	Eocene?
Surprise (Battle Mountain district)	1987: 225,000 oz Au 1988-91: production and reserves included in Fortitude figures 1994: mined out	1987: 2,000 oz Au	skarn	37 Ma
Toiyabe	1988: 813,400 tons, 0.066 opt Au	1988: 32,000 oz Au, 10,300 oz Ag 1990-91: 20,480 oz Au, 15,125 oz Ag	lower Paleozoic calcareous siltstone	Eocene?
Victorine (Kingston district)	1992: 915,000 tons, 0.304 opt Au 1995: proven and probable reserves- 256,000 tons, 0.36 opt Au, plus <i>additional geologic resource</i> -31,160 oz Au 2000: 120,000 oz Au proven and probable reserves; 200,000 oz Au possible reserves		Cambrian to Ordovician Broad Canyon sequence	
LINCOLN COUNTY				
Atlanta gold property (Atlanta district)	1980: 1.1 million tons, 0.08 opt Au, 1.6 opt Ag 1996: 300,000 oz Au, 3 million oz Ag	1980: 88,000 oz Au, 1,710,000 oz Ag	Pogonip Group, Ely Springs and Laketown Dolomites, Oligocene silicic tuff, dacite dikes	early Miocene
Caliente property (Pennsylvania district)	1997: <i>geologic reserves</i> -50,000 tons, 0.03 opt Au, 0.80 opt Ag; <i>geologic resource</i> -700,000 tons, 0.039 opt Au		Tertiary diorite Tertiary andesite	
Easter and Delamar Project (Delamar district)	1994: <i>geologic resource</i> -3.36 million tons, 0.069 opt Au 1995: 1.5 million tons, 0.069 opt Au		Cambrian quartzite	Miocene
LYON COUNTY				
Fire Angel (Como district)	1989: 5,600 oz Au, <i>geologic resource</i> - 148,500 oz Au			
Hydra-Hercules (Como district)	1997: 259,329 oz Au, 1,956,511 oz Ag		Tertiary andesite	
Pine Grove (Pine Grove district)	1994: 2.5 million tons, 0.061 opt Au		Cretaceous granodiorite	
South Comstock Joint Venture (Silver City district)	1994: 3 million tons, 0.05 opt Au 1995: 100,000 oz Au			
Talapoosa (Talapoosa district)	1988: 2.5 million tons, 0.041 opt Au, 0.53 opt Ag oxide 14.9 million tons, 0.03 opt Au, 0.49 opt Ag sulfide 1995: <i>geologic resource</i> -45 million tons, 0.025 opt Au and 0.33 opt Ag, including proven and probable reserves of 29.9 million tons, 0.026 opt Au and 0.4 opt Ag		Kate Peak Formation	Miocene

MAJOR PRECIOUS-METAL DEPOSITS (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
MINERAL COUNTY				
Aurora Mine (Aurora district)	1989: 347,000 tons, 0.253 opt Au 1996: 900,000 tons, 0.1 opt Au 2003: <i>see</i> Esmeralda	1989-90: 25,656 oz Au, 34,562 oz Ag 1991: 15,000 oz Au 1992-93: 23,600 oz Au, 52,200 oz Ag 1995: 15,000 oz Au, 35,000 oz Ag 1996: 10,374 oz Au 1997-98: 15,414 oz Au, 7,287 oz Ag	andesite, rhyolite	10 Ma
Aurora Partnership (Aurora district)	1983: 1.5 million tons, 0.129 opt Au, 0.3 opt Ag 1995: 230,000 tons, 0.208 opt Au (in portion of Humboldt vein system) 2003: <i>see</i> Esmeralda	1930s: 100,000 oz Au 1983: 10,000 oz Au 1988: 10,302 oz Au 1989: 27,825 oz Au, 26,000 oz Ag 1991-96: 157,796 oz Au, 318,933 oz Ag	andesite, rhyolite	10 Ma
Borealis (Borealis district)	1981: 2.1 million tons, 0.08 opt Au, 0.5 opt Ag 1988: 1.792 million tons, 0.046 oz Au/ton 2000: 33.4 million tons, 0.044 opt Au, 0.22 opt Ag cumulative resource 2005 (May): 44.7 million tons, 0.03 opt Au (measured and indicated resource) 34.8 million tons, 0.02 opt Au (inferred resource) 2006: 8.235 million tons, 0.022 opt Au, 0.158 opt Ag (measured and indicated resource, oxide) 35.157 million tons, 0.032 opt Au, 0.164 opt Ag (measured and indicated resource, oxide, partially oxidized, sulfides) 16.909 million tons, 0.028 opt Au, 0.106 opt Ag (inferred resource, oxide, partially oxidized, and sulfides)	1981-84: 170,000 oz Au 1986-88: 116,256 oz Au 1989-90: 107,495 oz Au 52,401 oz Ag	rhyolite flow dome, andesite flows, breccias, volcaniclastic rocks	5 Ma
Candelaria Mine (Candelaria district)	1982: 18.5 million tons, 1.09 opt Ag, 0.009 opt Au 1988: 24 million tons, 1.267 opt Ag, 0.011 opt Au 1999: 27.3 million tons, 3.4 opt Ag unmined resource; additional 8 million oz Ag in low-grade stockpile 2000: 48,000 oz Au and 45.4 million oz Ag indicated reserves	1982: 1.7 million oz Ag, 9,000 oz Au 1987: total production was 10 million oz Ag as of June 1987 1988-98: 30.67 million oz Ag, 95,218 oz Au 1999: 96,896 oz Ag, 237 oz Au	Candelaria Formation serpentinite, granitic dikes	Cretaceous
Denton-Rawhide (Rawhide district)	1986: 24.1 million tons 0.045 opt Au, 0.47 opt Ag 1989: reserves-29.4 million tons, 0.040 oz Au and 0.368 opt Ag; <i>geologic resource</i> -59.3 million tons, 0.0274 opt Au, 0.298 opt Ag 1997: 447,000 oz Au, 3.9 million oz Ag	1990-98: 916,800 oz Au, 7,438,000 oz Ag 1999: 115,900 oz Au, 665,000 oz Ag 2000: 104,349 oz Au, 817,787 oz Ag 2001: 100,747 oz Au, 727,095 oz Ag 2002: 82,584 oz Au, 695,248 oz Ag 2003: 63,283 oz Au, 525,809 oz Ag 2004: 43,390 oz Au, 446,000 oz Ag 2005: 33,820 oz Au, 311,760 oz Ag 2006: 26,334 oz Au, 235,870 oz Ag 2007: 19,597 oz Au, 160,964 oz Ag	rhyolite plugs, flows, tuffs, breccias	16 Ma
Esmeralda (Aurora district)	2003: 30,710,500 tons, 0.031 opt Au bulk-minable measured and indicated resource 9,206,300 tons, 0.025 opt Au bulk-minable inferred resource 192,152 tons, 0.50 opt Au underground-minable resource		andesite rhyolite	10 Ma

MAJOR PRECIOUS-METAL DEPOSITS, MINERAL COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Mina Gold (Bell district)	1997: 1.77 million tons, 0.055 opt Au <i>geologic resource</i>	1997: exploration	Tertiary feldspar porphyry	
Mindora (Garfield district)	1988: 1.0 million tons, 0.037 opt Au and 1.78 opt Ag	1988: exploration		
Santa Fe (Santa Fe district)	1984: 8 million tons, 0.032 opt Au, 0.26 opt Ag 1990: 6.8 million tons, 0.035 opt Au and 0.241 opt Ag	1989-95: 345,499 oz Au, 710,629 oz Ag	Luning Formation	Miocene
NYE COUNTY				
Baxter Springs (Manhattan district)	1988: 1 million tons, 0.050 opt Au 1990: <i>geologic resource</i> -5 million tons 0.050 opt Au			
Bruner property, Duluth zone (Bruner district)	1992: <i>geologic resource</i> -15 million tons, 0.026 opt Au	1993: exploration	Tertiary volcanic rocks	Miocene
Bullfrog (Bullfrog district)	1989: 18.6 million tons, 0.097 opt Au 1996: 10.2 million tons, 0.062 opt Au proven and probable reserves; 3.7 million tons, 0.040 opt Au mineralized material	1989-98: 2,237,484 oz Au, 2,935,484 oz Ag 1999: 76,159 oz Au, 90,967 oz Ag	rhyolitic ash-flow tuff	9.5 Ma
Cimmaron (San Antone district)	2004: 1,730,600 tons, 0.035 opt Au inferred material			
Corcoran Canyon (Barcelona district)	2004: 1,774,700 tons, 0.025 opt Au, 5.11 opt Ag indicated and inferred material		rhyolitic ash-flow tuff	
Daisy (Bare Mountain district)	1993: 4.7 million tons, 0.024 opt Au <i>geologic resource</i> -430,000 oz Au 1998: 4.2 million tons, 0.033 opt Au proven and probable reserves	1997-98: 64,504 oz Au 1999: 30,660 oz Au 2000: 8,740 oz Au 2001: 347 oz Au	Cambrian Bonanza King, Nopah, and Carrara Formations	11-13 Ma(?)
Gold Bar (Bullfrog district)	1987: 1.23 million tons Au ore 1993: idle		silicic volcanic rocks	Miocene
Golden Arrow (Golden Arrow district)	1997: 12.4 million tons, 0.039 opt Au resource		Tertiary rhyolite tuff	
Gold Hill property (Round Mt. district)	1998: 306,620 oz Au, 4,871,890 oz Ag potential resource 2003: (included in Round Mt.)		rhyolite ash-flow tuff	26 Ma(?)
Gold Wedge property (Manhattan district)	2002: 104,706 oz Au, 0.494 opt Au measured resource; 47,052 oz Au, 0.583 opt Au indicated resource; 394,626 oz Au, 0.494 opt Au inferred resource 2005: 333,000 tons, 0.310 opt Au (measured and indicated resource)			
Longstreet property (Longstreet district)	1989: 4 million tons, 0.024 opt Au, <i>geologic resource</i> -9.6 million tons, 0.024 opt Au		rhyolitic volcanic rocks	Oligocene
Manhattan property (Manhattan district)	1989: <i>geologic resource</i> -100,000 tons, 0.50 opt Au 1997: 1.7 million tons, 0.13 opt Au proven and probable		Cambrian Gold Hill Formation	
Midway (Rye Patch district)	1997: 270,000 oz Au preliminary resource 2005: 5,526,000 tons, 0.039 opt Au (inferred resource)		Ordovician Palmetto Formation Tertiary volcanic rocks	

MAJOR PRECIOUS-METAL DEPOSITS, NYE COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Montgomery Shoshone (Bullfrog district)	1988: 3.1 million tons, 0.072 opt Au, 0.240 opt Ag		rhyolitic ash-flow tuff	9.5 Ma
Nevada Mercury (Bare Mountain district)	1994: <i>geologic resource</i> -50,000 oz Au			
Northumberland (Northumberland district)	1988: 12 million tons, 0.06 opt Au 2005 (July): 30,910,000 tons, 0.067 opt Au (measured and indicated resource) 4,381,000 tons, 0.091 opt Au (inferred resource) 2007 (June 2008): 36.518 million tons, 0.06 opt Au (measured and indicated resource); 7.418 million tons, 0.10 opt Au (inferred resource)	1939-42: 327,000 oz Au 1981-84: 950,000 tons/year 1988: 29,667 oz Au, 130,394 oz Ag 1981-1990: ~230,000 oz Au, 485,000 oz Ag	Roberts Mountains and Hanson Creek Formations, granodiorite, tonalite, quartz porphyry dikes	
Paradise Peak/ Ketchup Flats pit (Fairplay district)	1984: 10 million tons, 0.1 opt Au, 3 opt Ag 1989: 5.22 million tons, 0.09 opt Au, 3.62 opt Ag, mill ore; 11.52 million tons, 0.036 opt Au, 0.445 opt Ag, leachable 1996: 5 million tons, 0.022 opt Au, 0.2 opt Ag (Ketchup Flats)	1986-88: 560,000 oz Au, 8.5 million oz Ag 1989-94: 1,054,084 oz Au, 15.6 million oz Ag	rhyolite and andesite flows, ash-flow and air-fall tuffs	Miocene
Reward property (Bare Mountain district)	1998: 77,500 oz Au 2007: 5,181,340 tons, 0.0266 opt Au (proven and probable reserves); 6,423,571 tons, 0.0245 opt Au (measured and indicated resource)		Cambrian Wood Canyon Formation	
Round Mountain (Smoky Valley) (Round Mountain district)	1977: 12 million tons, 0.061 opt Au, 0.07 opt Ag 1989: <i>geologic resource</i> -271 million tons, 0.032 opt Au 1999: 320 million tons, 0.018 opt Au proven and probable reserves; 126 million tons, 0.016 opt Au mineralized material 2000: 273.2 million tons, 0.019 opt Au proven and probable reserves; 18.7 million tons, 0.022 opt Au mineralized material 2002: 192.1 million tons, 0.020 opt Au proven and probable reserves; 54.6 million tons, 0.012 opt Au mineral resource 2003: 129,866,000 tons, 0.017 opt Au proven reserves; 49,838,000 tons, 0.020 opt Au probable reserves; 21,000,000 tons, 0.013 opt Au measured resource; 54,440,000 tons, 0.018 opt Au indicated resource; 19,580,000 tons, 0.018 opt Au inferred resource (includes Gold Hill) 2004: 433,400,000 tons, 0.018 opt Au proven and probable reserves; 64,000,000 tons, 0.015 opt Au mineral resource 2005: 275,608,000 tons, 0.017 opt Au (proven and probable reserves); 35,412,000 tons, 0.017 opt Au (measured and indicated resource); 35,374,000 tons, 0.013 opt Au (inferred resource) 2006: 226,084,000 tons, 0.017 opt Au (proven and probable reserves); 26,134,000 tons, 0.019 opt Au (measured and indicated resource); 32,898,000 tons, 0.013 opt Au (inferred resource) 2007: 141,736,000 tons, 0.018 opt Au (proven and probable reserves); 30,632,000 tons, 0.022 opt Au (measured and indicated resource); no released inferred resource	1977-84: 313,480 oz Au, 160,419 oz Ag 1987-88: 424,300 oz Au 1989: 386,227 oz Au, 211,297 oz Ag 1990: 483,192 oz Au, 236,600 oz Ag (includes Manhattan) 1991-98: 3,248,946 oz Au, 2,607,892 oz Ag 1999: 541,808 oz Au, 464,415 oz Ag 2000: 640,133 oz Au, 424,530 oz Ag 2001: 746,949 oz Au, 509,121 oz Ag 2002: 755,493 oz Au, 627,579 oz Ag 2003: 784,587 oz Au, 761,333 oz Ag 2004: 762,966 oz Au, 773,950 oz Ag 2005: 736,886 oz Au, 636,361 oz Ag 2006: 657,911 oz Au, 644,017 oz Ag 2007: 587,445 oz Au, 955,681 oz Ag	rhyolite ash-flow tuff	26 Ma
Sterling (Bare Mountain district)	1983: 200,000 tons, 0.20 opt Au 1989: 469,000 tons, 0.21 opt Au 1996: 129,000 tons, 0.245 opt Au	1983-88: 75,900 oz Au 1990-91: 24,841 oz Au 1995-98: 36,811 oz Au 1999: 3,093 oz Au	Wood Canyon and Bonanza King Formations	14 Ma
South Monitor (west of Ellendale district)	1996: 250,000 oz Au 1997: 14 million tons, 0.026 opt Au, 0.12 opt Ag		Tertiary volcanic rock	

MAJOR PRECIOUS-METAL DEPOSITS, NYE COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Sullivan (Fairplay district)	1987: 10.2 million tons, 0.039 opt Au, 0.086 opt Ag and 0.37% Cu 1995: proven and possible-17 million tons of 0.34% Cu, 0.0255 opt Au, + 8.5 million tons of 0.32% Cu		Mesozoic granodiorite and metavolcanic rocks	Mesozoic
PERSHING COUNTY				
Bunce (Velvet district)	1989: <i>geologic reserves</i> -600,000 tons, 0.04 opt Au 1990: 500,000 tons, 0.04 opt Au		rhyolite	Miocene?
Colado Gold (Willard district)	1997: 15 million tons, 0.022 opt Au resource 2007 (May 2008): 22,707,000 tons, 0.012 opt Au (oxide, measured and indicated resource); 594,000 tons, 0.070 opt Au (sulfide, measured and indicated resource); 79,129,000 tons, 0.015 opt Au (inferred resource)		Triassic-Jurassic metasedimentary rocks	
Florida Canyon (Imlay district)	1987: 22 million tons, 0.023 opt Au 1988: 37 million tons, 0.023 opt Au 1997: reserves-45.5 million tons, 0.024 opt Au proven and probable mineralized material, 122.8 million tons, 0.022 opt Au 2002: 20 million tons, 0.017 opt Au proven and probable reserves 2003: 374,393 oz Au proven and probable reserves 2004: 16,792,000 tons, 0.016 opt Au proven and probable reserves	1987-88: 109,300 oz Au 1989-98: 1,146,148 oz Au, 610,326 oz Ag 1999: 139,590 oz Au, 111,232 oz Ag 2000: 173,623 oz Au, 129,361 oz Ag 2001: 121,206 oz Au, 98,645 oz Ag 2002: 121,516 oz Au, 72,567 oz Ag 2003: 101,811 oz Au, 60,065 oz Ag 2004: 73,082 oz Au, 60,405 oz Ag (includes Standard) 2005 (Florida Canyon): 29,186 oz Au, 17,571 oz Ag 2005 (Standard): 21,522 oz Au, 51,751 oz Ag 2006 (Florida Canyon): 16,061 oz Au, 12,423 oz Ag 2006 (Standard): 46,070 oz Au, 64,497 oz Ag 2007 (Florida Canyon): 31,916 oz Au, 28,152 oz Ag 2007 (Standard): 11,814 oz Au, 24,735 oz Ag	Grass Valley Formation	2 Ma
Goldbanks Project (Goldbanks district)	1994: 900,000 oz Au 1996: 80.8 million tons, 0.019 opt Au proven and probable reserves; 7.4 million tons, 0.014 opt Au possible reserves; 106.8 million tons, 0.028 opt Au drill indicated resource 2000: 569,000 oz Au and 1.7 million oz Ag indicated reserves 2006: 28,310,000 tons, 0.02 opt Au (inferred resource, Main and KW zones)			
Relief Canyon (Antelope Springs district)	1983: 9 million tons, 0.032 opt Au 1988: ~ 1.3 million tons, 0.03 opt Au 1996: 8.6 million tons, 0.022 opt Au	1984: 24,500 oz Au 1987-88: 82,000 oz Au 1989-90: 34,266 oz Au, 39,235 oz Ag	Natchez Pass Limestone, Grass Valley Formation	Tertiary
Rochester (Rochester district)	1981: 75 million tons, 1.5 opt Ag 1989: <i>geologic resource</i> -94.5 million tons, 0.012 opt Au, 1.40 opt Ag 1997: 74.2 million oz Ag, 603,000 oz Au	1986-98: 810,329 oz Au, 59.3 million oz Ag 1999: 70,396 oz Au, 6.2 million oz Ag 2000: 75,886 oz Au,	Koipato Group, Weaver Rhyolite, Rochester Rhyolite	Late Cretaceous

MAJOR PRECIOUS-METAL DEPOSITS, PERSHING COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
	2000: 50 million oz Ag, 410,000 oz Au (includes Nevada Packard) 2001: 51.4 million tons, 0.85 opt Ag, 0.007 opt Au proven and probable reserves; 61.8 million tons, 0.75 opt Ag, 0.005 opt Au mineralized material 2002: 46.9 million tons, 0.008 opt Au, 0.85 opt Ag proven and probable reserves; 33.8 million tons, 0.009 opt Au, 0.77 opt Ag mineralized material (includes Nevada Packard) 2003: 32.7 million tons, 0.01 opt Au, 0.91 opt Ag proven and probable reserves; 40.3 million tons, 0.01 opt Au, 0.77 opt Ag mineralized material 2004: 21,453,000 tons, 0.010 opt Au, 0.87 opt Ag proven reserves; 2,545,000 tons, 0.010 opt Au, 0.81 opt Ag probable reserves; 26,205,000 tons, 0.010 opt Au, 0.81 opt Ag measured resource; 8,551,000 tons, 0.010 opt Au, 0.96 opt Ag indicated resource; 308,000 tons, 0.003 opt Au, 1.73 opt Ag inferred resources 2005: 10,168,000 tons, 0.011 opt Au, 0.86 opt Ag (probable reserves) 15,646,000 tons, 0.010 opt Au, 1.03 opt Ag (measured and indicated resource) 2006: 3,720,000 tons, 0.007 opt Au, 0.66 opt Ag (proven reserves) 15,235,000 tons, 0.010 opt Au, 0.94 opt Ag (measured and indicated resource) 2007: 32,664,000 tons, 0.010 opt Au, 0.86 opt Ag (measured and indicated resource)	6,678,274 oz Ag 2001: 81,200 oz Au, 6,478,916 oz Ag 2002: 71,905 oz Au, 6,417,792 oz Ag 2003: 52,363 oz Au, 5,585,385 oz Ag 2004: 69,456 oz Au, 5,669,073 oz Ag 2005: 70,298 oz Au, 5,720,489 oz Ag 2006: 71,891 oz Au, 5,113,504 oz Ag 2007: 50,408 oz Au, 4,614,779 oz Ag		
Rosebud Project (Rosebud district)	1992: 570,000 oz Au (0.362 opt), 5.5 million oz Ag (5.5 opt) 1999: 216,000 tons, 0.323 opt Au	1997-98: 225,651 oz Au, 815,123 oz Ag 1999: 112,652 oz Au, 247,900 oz Ag 2000: 47,944 oz Au, 191,919 oz Ag	Tertiary volcanic rocks	Miocene
Spring Valley (Spring Valley district)	2005-2006: 10,030,000 tons, 0.024 opt Au (measured and indicated resource) 7,753,000 tons, 0.025 opt Au (inferred resource) 2007: 50,600,000 tons, 0.0196 opt Au (inferred resource)			
Standard (Imlay district)	2002: 17.2 million tons, 0.019 opt Au proven and probable reserves 2003: 404,100 oz Au proven and probable reserves 2004: 25,776,000 tons, 0.017 opt Au proven and probable reserves	1939-42, 1946-49: 45,743 oz Au, 127,451 oz Ag 2004: included with Florida Canyon 2005: 21,522 oz Au, 51,751 oz Ag 2006: 46,070 oz Au, 64,497 oz Ag	Natchez Pass Limestone, Grass Valley Formation argillite	
Tag-Wildcat (Farrel district)	1989: <i>geologic resource</i> -1.5 million tons, 0.043 opt Au; reserves-416,000 tons, 0.076 opt Au 2003: see Wildcat		Tertiary volcanic rocks	Miocene
Trinity (Trinity district)	1987: 1 million tons, 5.25 opt Ag Sulfide resource: ~4 million tons, 2.5 opt Ag	1987-89: ~5-6 million oz Ag	rhyolite porphyry, rhyolite tuff	26 Ma
Wildcat (Farrel district)	2003: 38.108 million tons, 0.018 opt Au indicated resource; 28.355 million tons, 0.015 opt Au inferred resource		Tertiary volcanic	Miocene
Willard (Willard district)	2007: 17,295,000 tons, 0.016 opt Au (oxide, measured and indicated resource) 448,000 tons, 0.070 opt Au (sulfide, measured and indicated resource) 20,849,000 tons, 0.015 opt Au (inferred resource)	~90,000 oz Au (late 1980s to early 1990s)	Jurassic-Triassic Grass Valley Formation	6 Ma

MAJOR PRECIOUS-METAL DEPOSITS (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
STOREY COUNTY				
Hartford Hill Complex (includes Billie the Kid Mine) (Silver City district)		2004: 2,836 oz Au, 12,695 oz Ag 2005: 5,715 oz Au, 26,488 oz Ag 2006: 5,000 oz Au, 20,000 oz Ag (estimated)		
Comstock heap leach project (Comstock district)	1992: 475,000 tons, 0.072 opt Au, 0.60 opt Ag 1996: 100,000 oz Au, 1.2 million oz Ag			
Flowery (Golden Eagle) (Comstock district)	1989: 1 million tons, 0.037 opt Au 1993: 362,000 tons, 0.064 opt Au, 0.97 opt Ag, <i>geologic resource</i> -88,128 oz Au and 1 million oz Ag	1988: 836 oz Au, 9,473 oz Ag 1990: 6,000 oz Au, 70,000 oz Ag 1992-97: 16,949 oz Au, 195,701 oz Ag	Alta Formation	12 Ma
Oliver Hills (Comstock district)	1990: 3.37 million tons, 0.054 opt Au, 1.2 opt Ag 1993: 4 million tons, 0.05 opt Au, 0.5 opt Ag, <i>geologic resource</i> -225,000 oz Au and 2.25 million oz Ag	1991: 573 oz Au, 6,947 oz Ag		
WASHOE COUNTY				
Mountain View Gold Project (Deephole district)	1995: 19.5 million tons, 0.027 opt Au 1998: 10.7 million tons, 0.055 opt Au 2002: 23.219 million tons, 0.013 opt Au indicated resource; 4.466 million tons, 0.039 opt Au inferred resource		rhyolite	Miocene
Olinghouse (Olinghouse district)	1994: <i>geologic resource</i> -500,000 opt Au, 0.057 opt Au 1997: 512,800 oz Au proven and probable reserves, 0.042 opt Au	1998: 2,912 oz Au, 1,879 oz Ag 1999: 28,655 oz Au, 17,598 oz Ag	Miocene andesite	Miocene
Hog Ranch (Leadville district)	1984: 2.5 million tons, 0.085 opt Au 1988: 5.5 million tons, 0.064 opt Au proven and probable reserves; 20.1 million tons, 0.029 opt Au <i>geologic resource</i> 2003: 1,598,350 tons, 0.033 opt Au indicated; 440,924 tons, 0.054 opt Au inferred	1986-87: 80,000 oz Au 1988-95: 118,045 oz Au, 25,400 oz Ag	rhyolite, explosion breccia sinter	15-16 Ma
Wind Mountain (San Emidio)	1988: 15 million tons, 0.021 opt Au, 0.42 opt Ag 2007: 33,657,553 tons, 0.012 opt Au (measured and indicated resource) 9,758,547 tons, 0.009 opt Au (inferred resource)	1989: 30,900 oz Au, 335,000 oz Ag 1991: 91,000 oz Au, 405,000 oz Ag 1992: 54,690 oz Au, 297,403 oz Ag 1993: 19,570 oz Au, 92,630 oz Ag	Tertiary sedimentary rocks	late Tertiary or Quaternary
WHITE PINE COUNTY				
Alligator Ridge (Bald Mountain district)	1983: 5 million tons, 0.09 opt Au 1989: 1 million tons, 0.064 opt Au 1992: 11.5 million tons, 0.046 opt Au; <i>geologic resource</i> -661,888 oz Au, includes Casino/Winrock	1981-90: 632,057 oz Au, 84,188 oz Ag 1991-92: 27,450 oz Au 1993: included with Bald Mountain 1994: 40,000 oz Au 1995: idle 1996: included with Bald Mountain	Pilot Shale	Mesozoic or early Tertiary

MAJOR PRECIOUS-METAL DEPOSITS, WHITE PINE COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Bald Mountain (Bald Mountain district)	1989: 6.7 million tons, 0.069 opt Au 1999: 32.6 million tons, 0.041 opt Au, proven and probable reserves; 31.7 million tons, 0.044 opt Au, mineralized material 2000: 509,000 oz Au proven and probable; 2.03 million oz Au measured and indicated resource 2002: 508,000 oz Au proven and probable reserves; 2.03 million oz Au measured mineral resource 2003: 10,143,000 tons, 0.033 opt Au proven reserves; 8,549,000 tons, 0.040 opt Au probable reserves; 10,371,000 tons, 0.027 opt Au measured resource; 10,836,000 tons, 0.043 opt Au indicated resource; 19,224,000 tons, 0.029 opt Au inferred resource 2004: 21,530,000 tons, 0.044 opt Au proven and probable reserves; 53,586,000 tons, 0.027 opt Au measured and indicated resource; 10,808,000 tons, 0.018 opt Au inferred resource 2005 (includes Alligator Ridge): 105,050,700 tons, 0.032 opt Au (proven and probable reserves) 35,000,000 tons, 0.023 opt Au (measured and indicated resource) 14,868,000 tons, 0.026 opt Au (inferred resource) 2006 (includes Alligator Ridge): 109,922,000 tons, 0.031 opt Au (proven and probable reserves) 23,289,000 tons, 0.035 opt Au (measured and indicated resource) 17,290,000 tons, 0.023 opt Au (inferred resource) 2007 (includes Alligator Ridge): 128,093,000 tons, 0.024 opt Au (proven and probable reserves) 36,493,000 tons, 0.024 opt Au (measured and indicated resource) 24,648,000 tons, 0.017 opt Au (inferred resource)	1986: 50,000 oz Au 1988-89: 103,731 oz Au 1990-93: 287,110 oz Au, 76,745 oz Ag 1994: 80,000 oz Au 1995-96: 221,908 oz Au, 62,460 oz Ag 1997-98: 243,500 oz Au, 63,416 oz Ag 1999: 105,475 oz Au, 18,058 oz Ag 2000: 134,469 oz Au, 14,400 oz Ag 2001: 108,392 oz Au, 18,321 oz Ag 2002: 172,328 oz Au, 21,547 oz Ag 2003: 90,602 oz Au, 26,810 oz Ag 2004: 46,685 oz Au, 27,635 oz Ag 2005: 77,767 oz Au, 32,652 oz Ag 2006: 277,615 oz Au, 32,121 oz Ag 2007: 125,998 oz Au, 21,702 oz Ag	quartz porphyry, Cambrian shale and limestone	Jurassic?
Bellview (White Pine district)	1988: 277,000 tons, 0.04 opt Au, <i>geologic resource</i> -1 million tons, 0.036 opt Au			
Casino/Winrock (Bald Mountain district)	1989: Casino-804,000 tons, 0.054 opt Au; Winrock-1.3 million tons, 0.037 opt Au 1990: Winrock-993,000 tons, 39,000 oz Au 1992: <i>see Alligator Ridge</i>	1990-92: 46,800 oz Au	late Paleozoic sedimentary rocks	Eocene
Easy Junior (Nighthawk Ridge) (White Pine district)	1989: 5.68 million tons, 0.031 opt Au 1991: 137,000 oz Au	1990: 11,500 oz Au, 900 oz Ag 1997: 510 oz Au, 76 oz Ag	Devonian and Mississippian rocks	Eocene
Golden Butte (Cherry Creek district)	1989: 4.23 million tons, 0.031 opt Au	1989-91: 43,519 oz Au, 16,911 oz Ag	Chainman Shale	Cretaceous or Eocene
Griffon Gold property (White Pine district)	1993: <i>geologic resource</i> -60,000 oz Au 1994: <i>geologic resource</i> -50,454 oz Au, 0.039 opt Au 1995: proven and probable reserves-2,737,000 tons, 0.025 opt Au 1997: 100,000 oz Au	1998: 37,921 oz Au, 269 oz Ag 1999: 24,740 oz Au	upper Joana Limestone	
Horseshoe (Bald Mountain district)	1991: 1.5 million tons, 0.039 opt Au		Pilot Shale and intrusive quartz porphyry	36-38 Ma

MAJOR PRECIOUS-METAL DEPOSITS, WHITE PINE COUNTY (continued)

Deposit name	Reserves/resources	Production	Host rock	Mineralization age
Illipah (Illipah district)	1987: 57,000 oz Au	1987: ~25,000 oz Au/year 1988: 25,324 oz Au, mining ended 1989: 3,874 oz Au, heap-leached	Paleozoic sedimentary rocks	Eocene?
Little Bald Mtn. (Bald Mountain district)	1986: 1 million tons, 0.10 opt Au 1989: 200,000 tons, 0.13 opt Au; <i>geologic resource</i> -260,000 tons, 0.127 opt Au 1993: 140,000 tons, 0.13 opt Au, <i>geologic resource</i> -21,800 oz Au	1985-88: 21,700 oz Au 1989: 5,500 oz Au, 1,500 oz Ag	Antelope Valley Formation	35-38 Ma
Mt. Hamilton (White Pine district)	1988: 7.7 million tons, 0.05 opt Au, 0.5 opt Ag 1994: reserve-9.04 million tons, 0.052 opt Au, 0.38 opt Ag 1996: 10.8 million tons, 0.038 opt Au, 0.24 opt Ag 1997: 7.72 million tons, 0.035 opt Au	1995-97: 99,500 oz Au, 207,500 oz Ag	Dunderberg Shale	Cretaceous
Pan (White Pine district)	1989: 241,000 oz Au 1998: 10.86 million tons, 0.022 opt Au Drill-indicated and inferred 2003: 17,890,000 tons, 0.019 opt Au indicated resource; 7,986,000 tons, 0.016 opt Au inferred resource		Mississippian rocks	
Robinson (Robinson district)	1989: 46.0 million tons, 0.019 opt Au; <i>geologic resource</i> -1 million oz Au 1991: <i>geologic resource</i> -200 million tons 0.012 opt Au 1999: 194 million tons, 0.59% Cu, 0.007opt Au, proven and probable reserves 2003: 146.3 million tons, 0.687% Cu, 0.008 opt Au, proven and probable reserves 2005: 160,400,000 tons, 0.69% Cu,) 0.073 opt Au (proven and probable reserves) 610,979,000 tons, 0.55% Cu, 0.0064 opt Au (measured resource, 0.2% Cu cut-off) 171,858,000 tons, 0.44% Cu, 0.0041 opt Au (indicated resource, 0.2% Cu cut-off) 98,166,000 tons, 0.32% Cu, 0.0015 opt Au (inferred resource, 0.2% Cu cut-off) 2006: 122,401,000 tons, 0.69% Cu, 0.0076 opt Au (proven and probable reserves) 2007: 103,788,000 tons, 0.68% Cu, 0.0067 opt Au (proven and probable reserves)	1986: 48,000 oz Au, 96,000 oz Ag 1987-88: 88,957 oz Au 1989-90: 153,828 oz Au, 121,340 oz Ag 1991: 21,674 oz Au 1992: 35,581 oz Au, 55,000 oz Ag 1993: 13,432 oz Au 1996-98: 196,000 oz Au, 783,500 oz Ag, 370 million lbs Cu 1999: 26,250 oz Au, 153,104 oz Ag, 62 million lbs Cu 2004: 12,228 oz Au, 27 million lbs Cu 2005: 80,941 oz Au, 191,479 oz Ag, 126 million lbs Cu 2006: 75,074 oz Au, 156,839 oz Ag, 121,319,197 lbs Cu, 260,000 lbs Mo 2007: 108,118 oz Au, 179,238 oz Ag, 131,986,134 lbs Cu, 62,033 lbs Mo	Rib Hill Sandstone, Cretaceous Riepe Spring Limestone, intrusions	
Taylor (Taylor district)	1980: 10 million tons, 3 opt Ag 1988: 5.92 million tons, 2.7 opt Ag (resource) 2007: 6,433,000 tons, 2.31 opt Ag (measured and indicated resource) 757,000 tons, 2.54 opt Ag (inferred resource)	1980: 1,200 tons/day	Guilmette and Joana Limestones, rhyolite dikes	Eocene or Oligocene
White Pine (White Pine district)	1989: 63,000 oz Au, 0.04 opt Au	1989: 20,654 oz Au	Pilot Shale	Oligocene?
Yankee (Bald Mountain district)	1992: 683,000 oz Au 1993: <i>see</i> Bald Mountain	1990: ~15,000 oz Au 1992: 10,800 oz Au	Pilot Shale	36-38 Ma?

MAJOR PRECIOUS-METAL DEPOSITS (continued)

Newmont Gold and Silver Production in the Carlin Trend

Production data for individual mines owned by Newmont Gold Co. in the Carlin trend are not available in many cases. Annual production of Newmont operations in the Carlin trend is as follows:

<u>Year</u>	<u>Gold (oz)</u>	<u>Silver (oz)</u>
1988	895,500	NA
1989	1,467,800	117,400
1990	1,676,000	NA
1991	1,575,700	NA
1992	1,588,000	98,000
1993	1,666,400	175,000
1994	1,554,000	158,000
1995	1,634,500	188,000
1996	1,700,000	322,000
1997	1,819,000	118,000
1998	1,575,391	150,400
1999	1,536,401	255,011
2000	1,865,648	108,111
2001	1,547,247	292,241
2002	1,378,782	277,753
2003	1,122,208	206,767
2004	1,287,674	363,052
2005	1,397,583	227,158
2006	1,310,258	169,212
2007	1,322,001	268,875

NA= not available

Other Metallic Deposits

by John L. Muntean

This is a compilation, in progress, of metallic deposits other than gold and silver. Initially, active projects with recently released reserves, resources, and production will be included. The information in this compilation was obtained from the Nevada Division of Minerals and from published reports, articles in mining newsletters, and company websites, annual reports, and press releases. Locations of active mines are shown on page 2, and contact information is listed in the Directory of Mining and Milling Operations.

Deposit name	Metals	Reserves/resources	Production
ELKO COUNTY			
Indian Springs (Delano district)	W	2007: 10.8 million tons, 0.171% WO ₃ (indicated resource); 8.2 million tons, 0.167% WO ₃ (inferred resource)	
EUREKA COUNTY			
Mount Hope (Mount Hope district)	Mo	2007: 965,926,000 tons 0.068% Mo (proven and probable reserves); 109,641,000 tons, 0.030% Mo (measured and indicated resource); 191,308,000 tons, 0.063% Mo (inferred resource)	
HUMBOLDT COUNTY			
Ashdown (Vicksburg district)	Mo		2006: 10,500 lbs Mo 2007: 247,466 lbs Mo
Cordero (Opalite district)	Ga	2007: 10 million tons, 47.7 ppm Ga (measured and indicated resource); 6.6 million tons, 43.7 ppm Ga (inferred resource)	
Kings Valley (Disaster district)	U	2006: 2,978,000 tons, 0.081% U ₃ O ₈ (inferred resource)	
LANDER COUNTY			
Phoenix (Battle Mountain district)	Cu	2007: 279,600,000 tons, 0.13% Cu (proven and probable reserves); 91,300,000 tons, 0.16% Cu (measured and indicated resource); 23,900,000 tons, 0.16% Cu (inferred resource)	2006: 6,235,096 lbs Cu 2007: 10,808,206 lbs Cu
LYON COUNTY			
Pumpkin Hollow (Yerington district)	Cu, Fe,	2007: 342,735,000 tons, 0.579% Cu, 0.0019 opt Au, 0.0700 opt Ag, 15.67% Fe (measured and indicated resource) 438,164,000 tons, 0.446% Cu, 0.0015 opt Au, 0.0700 opt Ag, 10.23% Fe (inferred resource)	

OTHER METALLIC DEPOSITS (continued)

Deposit name	Metals	Reserves/resources	Production
NYE COUNTY			
Liberty (formerly known as Hall-Tonopah) (San Antone district)	Mo	2007 (April 2008): 432,951,000 tons 0.071% Mo, 0.07% Cu (proven and probable reserves); 109,336,000 tons, 0.052% Mo, 0.11% Cu (measured and indicated resource); 127,200,000 tons, 0.051% Mo, 0.08% Cu (inferred resource)	
PERSHING COUNTY			
Springer (Mill City district)	W	1983: 3.59 million tons, 0.446% WO ₃ (historical General Electric resource)	
WHITE PINE COUNTY			
Robinson (Robinson district)	Cu, Mo	2006: 122,401,000 tons, 0.69% Cu (proven and probable reserves) 2007: 103,788,000 tons, 0.68% Cu (proven and probable reserves)	2006: 121,319,197 lbs Cu, 260,000 lbs Mo 2007: 131,986,134 lbs Cu, 62,033 lbs Mo

Industrial Minerals

by David A. Davis

The total value of industrial minerals produced in Nevada in 2007 was estimated at \$601 million, which was about 3% higher than in 2006. In decreasing order of estimated value, the most important Nevada industrial minerals in 2007 were construction aggregate, lime, diatomite, cement, barite, magnesia, lithium, gypsum, silica, and clay, each valued at more than \$10 million. Commodities with values of less than \$10 million were dolomite, perlite, dimension stone, salt, zeolite, and gemstones. Borate and zeolite were processed in Nevada but mined in California, and were not included in the estimate of total industrial mineral value reported above. Data used for these estimates, and data reported for individual commodities below, were obtained from the Nevada Division of Minerals, the U.S. Bureau of Land Management, or directly from companies that produced the commodities. Data are given in short tons unless otherwise noted. U.S. Geological Survey data cited are from commodity reports on the agency's website.

AGGREGATE (SAND AND GRAVEL, CRUSHED STONE)

According to the U.S. Geological Survey, United States production of crushed stone and construction sand and gravel decreased about 9% to a little over 3 billion tons valued at \$22 billion in 2007 from almost 3.4 billion tons in 2006. Steady production increases totaled more than 15% between 2002 and 2006. Consumption declined almost 9% to a little over 3 billion tons in 2007 from almost 3.4 billion tons in 2006. A small difference of about 23 million tons between production and consumption was made up by imports mostly from Canada and Mexico. The average price for this material increased almost 8% to \$7.20 per ton in 2007. Steady average price increases over the last ten years have totaled more than 57%.

According to the U.S. Geological Survey, in 2007, Nevada produced an estimated 47,070,000 tons of construction sand and gravel valued at \$198,000,000 and 12,340,000 tons of crushed stone valued at \$97,189,000. The production and value of construction sand and gravel declined 15% and 12% respectively, and the production and value of crushed stone increased 10% each. The total production value of almost \$295.5 million makes construction aggregate the third most valuable commodity produced in the state in 2007—well below the value of Nevada's gold production and about 38% less than the value of second-ranked copper production, but about 2.6 times

that of fourth-ranked silver. Production from sand and gravel deposits accounted for about 79% of aggregate production statewide, with crushed stone and lightweight aggregate making up the balance.

In the past, we have generated our own numbers for aggregate production from data obtained from the Nevada Division of Minerals and the aggregate producers. Our numbers were generally lower than those reported by the U.S. Geological Survey. This was in part from different ways of estimating unreported production and from the U.S. Geological Survey including estimates of crushed rock used to make lime and cement, which in Nevada may average about 4 million tons annually. From this point on, we will be using numbers generated by the U.S. Geological Survey. However, the aggregate production figures for 2006 that are reported in the Overview section of this report have not been adjusted to be the same as the U.S. Geological Survey numbers.

Construction aggregate produced in the Las Vegas area in 2007, estimated at about 43 million tons, was about 15% less than in 2006. Sand and gravel operations accounted for about 75% of the aggregate used in the Las Vegas metropolitan area in 2007. As in past years, the Lone Mountain area in northwest Las Vegas remained the most important source of sand and gravel aggregate. The Lone Mountain area produced more than 10 million tons in 2005 and 2006, but is estimated to have fallen below that in 2007. Significant production also came from sand and gravel pits and stone quarries south and northeast of Las Vegas, and in the El Dorado Valley area west of Boulder City. Sand and gravel from portable crushers at construction sites were also important producers of base aggregate in Las Vegas.

The Lone Mountain Pit area is under pressure on its eastern and southeastern flanks from residential development. Recent meetings and discussions involved plans including looping Clark County Route 215 along the eastern edge of the mining area and closing portions of the eastern part of the mining area by 2012. Mining would be allowed to continue and expand farther to the west away from the residential development.

Companies in the Las Vegas area that produced more than one million tons of aggregate in 2007 were Aggregate Industries, Diamond Construction, Impact Sand and Gravel, Las Vegas Paving Corporation, and Nevada Ready Mix Corporation. Companies with production in excess of 500,000 tons per year were American Sand and Gravel and Wells Cargo, which had each produced more than a million tons in 2006. Hollywood Sand and Gravel, which produced more than 500,000 tons in 2006, produced less than that in 2007.

Las Vegas Paving, a major producer of asphaltic concrete, mostly produced sand and gravel from its Blue Diamond and Lone Mountain pits. The company also produced crushed stone from the Apex landfill about 10 miles northeast of Las Vegas. Nevada Ready Mix, a subsidiary of the Mitsubishi Corporation, mined most of its aggregate from a complex of pits in alluvium in the Lone Mountain area, with minor production coming from quarries in adjacent bedrock. Frehner Inc., a subsidiary of Aggregate Industries, mined and crushed limestone from its Sloan property a few miles south of Las Vegas. Rinker Materials, a subsidiary of CEMEX of Mexico, produced crushed granite from the El Dorado pit near Railroad Pass. Community pits and other aggregate mining facilities administered by the U.S. Bureau of Land Management and operated by several companies contributed about 7 million tons to the Las Vegas area total in 2007 . American Sand and Gravel and Hollywood Sand and Gravel mostly produced aggregate from community pits. The Southern Nevada Lightweight operation near Jean produced aggregate for lightweight concrete block and sand for use in stucco. Lightweight aggregate was also shipped to the Las Vegas market by the Cind-R-Lite Block Company from a cinder operation near Amargosa Valley in Nye County. Granite Construction, who produced more than 500,000 tons in 2006 from the Apex pit, sold that operation to Ready Mix in 2007.

The U. S. Bureau of Land Management has received a number of requests for materials from their southern Nevada community pits. The following projects are required to go through the competitive bid process, and the U. S. Bureau of Land Management has completed environmental assessments. Diamond Construction requested sand and gravel from the North Jean Community Pit about seven miles south southwest of Sloan in Clark County. The project involves the sale of 500,000 tons of sand and gravel from each of three parcels. All Star Aggregate, Inc., requested 19.5 million tons of aggregate from 59.3 acres on a limestone outcrop on Sheep Mountain in the South Jean Lake Community Pit about 14 miles south of Sloan in Clark County. Twelve acres of the project would overlap 30 acres All Star is already mining. Las Vegas Paving Corporation requested 700,000 cubic yards of material from the East Community Pit just east of Las Vegas. American Asphalt and Aggregate requested 600,000 tons of sand and gravel from 80 acres in the Henderson Community Pit south of Railroad Pass. Fifty acres of this are already being mined by American Asphalt and Aggregate, and another 30 acres are undisturbed land.

The U. S. Bureau of Land Management completed an environmental assessment for a project at the Cactus Springs Community Pit about 5 miles west of Indian Springs

in Clark County. The area is the site of a previously negotiated sale in 1998 that was never mined. The U. S. Bureau of Land Management has received a number of requests for material in this area, and the project would involve the sale of 500,000 tons of sand gravel from each of two 30 acre parcels. The U. S. Bureau of Land Management also completed an environmental assessment evaluating the potential sale of 2 million tons of material from the Salt Lake Highway Community Pit about 15 miles northeast of Las Vegas. The pit area consists of 280 acres disturbed by mining within a fenced area of 1,300 acres. The U. S. Bureau of Land Management believes there is an interest for the competitive sale of material, and at the beginning of 2007 the pit was mined by six companies with contracts.

The U. S. Bureau of Land Management completed an environmental assessment for a project in the Mesquite Community Pit about 1.5 miles south of Mesquite in Clark County. The U. S. Bureau of Land Management has received a number of requests for material in this area. The total area designated for the Mesquite Community Pit covers 500 acres, but about 120 acres within a fenced area are currently mined. The fenced area will not accommodate the material requests. Four companies were mining the pit in 2007. The U. S. Bureau of Land Management is proposing to sell 8 million tons of sand and gravel from four parcels covering 145 acres of undisturbed land on the Mesquite Community Pit site but just east of the fenced area.

The U. S. Bureau of Land Management completed an environmental assessment for a project in the Salt Lake Highway Community Pit about 4 miles southwest of Apex in Clark County. The U. S. Bureau of Land Management believed there was interest in the competitive sale of mineral materials from the pit, and studied potentially selling up to 2 million tons of material from three parcels covering 94 acres. The Salt Lake Highway Community Pit contains a fenced in 1,300-acre area of which 280 acres has been disturbed. In 2007, six companies were mining on 100 acres, and almost 11 million tons has been mined between 1994 and 2006.

About 11 million tons of construction aggregate was produced in the Reno-Sparks-Carson City area in 2007, about 15% less than in 2006. Granite Construction produced more than 1 million tons of aggregate from several pits in the area, but the bulk of the company's production was of crushed andesite and crushed granitic rock from its Lockwood and Hidden Canyon pits, respectively. A & K Earthmovers also produced more than one million tons from two pits, but much of this was fill. Martin Marietta Materials Inc., which produced more than 1 million tons in 2006, produced more than 500,000 tons in 2007. Most of Martin Marietta's production comes from the

Rocky Ridge Quarry north of Sparks, which produces crushed granitic rock. CEMEX owns the former All-Lite Aggregate crushed rhyolite pit and also operates the sand and gravel operation at the Paiute pit located near Wadsworth, which is leased from the Pyramid Lake Paiute Tribe. CEMEX produced more than 500,000 tons in 2007. Crushed rock accounted for about 60% of the aggregate used in 2007 in the Reno-Sparks-Carson City area. Lightweight aggregate, an important component of crushed rock production in the area, was produced by CEMEX, Rilite, and Basalite.

An estimated 5 million tons of aggregate were produced outside of the major metropolitan areas in Nevada in 2007. Operators in Nye County collectively produced an estimated 1,500,000 tons of aggregate in 2007, mostly in the Pahrump area. Churchill County produced over 900,000 tons, and Douglas County produced over 750,000 tons. Lyon County produced almost 500,000 tons, and Elko and Pershing Counties produced between 300,000 and 400,000 tons each. Humboldt County produced almost 300,000 tons. Lander County produced about 150,000 tons, and Esmeralda, Eureka, Lincoln, and White Pine Counties each produced less than 100,000 tons of aggregate in 2007.

At the end of 2007, Aggregate Industries sold their Mustang operation in Washoe County to Sierra Nevada Construction and their Mound House operation in Lyon County to RHB. Both pits were part of Frehner Construction, which was acquired by Bardon Materials, which in turn was acquired by Aggregate Industries.

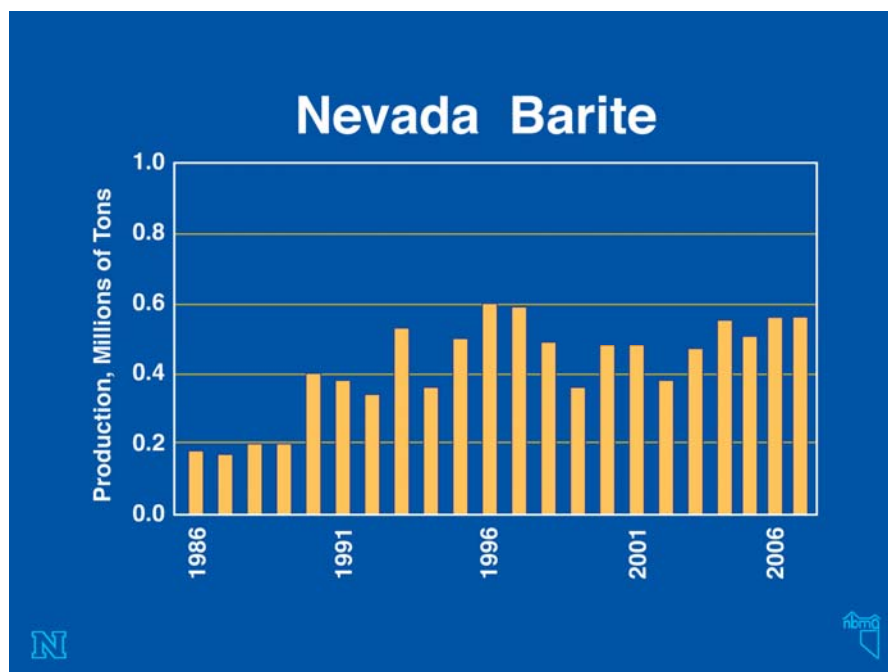
D and H Mining mined Spicerite and crushed stone for landscaping from a pit about 5 miles north of Beatty. Spicerite is a strong, bright white, hydrothermal altered tuff used to make bricks and blocks. It is marketed in southern Nevada and southern California.

In 2006, the White Pine County Road Department proposed to develop a 5-acre gravel pit in Duck Creek Basin along Success Loop about 3.5 miles east-southeast of Ely. This pit was proposed for use in improving unpaved portions of Success Loop and to supplement a similar pit at Gallagher Gap about 7 miles to the north. An environmental assessment was completed and a Free Use Permit was issued in 2007.

In 2006, the U. S. Bureau of Land Management proposed opening a community gravel pit on a 60-acre parcel near Comins Lake about 5 miles south of Ely. This pit would serve small contractors and the general public. The proposed pit was put on hold when the site was transferred to the Nevada Department of Wildlife under the White Pine County Conservation, Recreation, and Development Act of 2006. The proposed pit will probably be relocated and permitted in 2009.

BARITE

According to the U.S. Geological Survey, the United States production of barite decreased about 23% to an estimated 553,000 tons of barite valued at about \$21 million in 2007. Domestic production is mostly from Nevada with a small amount from Georgia. Domestic consumption was essentially unchanged at about 3.3 million tons. The U.S. imported almost 2.9 million tons of barite in 2007, a slight increase from 2006. It was mostly imported from China and India into the Gulf Coast for use in oil and gas drilling offshore in the Gulf of Mexico and onshore drilling in the southeastern and southwestern U.S. According to Schlumberger, the average monthly U.S. oil and gas drill rig count rose by about 3% to 1,961 during 2007, while the Canadian rig count fell by nearly 25% to 311. Although 2006 and 2007 saw overall declines of about 2% annually for the U.S. and Canada combined, this followed a drill rig count increase of 12% in 2005.



The price of barite in 2007 has remained high at about \$40 per ton from the mine according to the U.S. Geological Survey. This is the same as in 2006 but is 11% higher than in 2005 and 60% higher than in 2001. Prices have been pushed up not only by high demand, but also by high ocean freight rates, delays from port congestion in China, poor barge availability, high diesel costs to transport barite to the mills, and high natural gas prices for drying barite. These factors have helped spur production and exploration of previously mined and explored deposits in Nevada.

According to data from the Nevada Division of Minerals, Nevada's barite production, as measured by shipments and sales, remained about the same as in 2006 at 573,000 tons valued at \$20.8 million. Although this is a considerable increase over the recent low production of 377,000 tons in 2002, it is far below the 2.48-million-ton high in 1981. About 95% of the barite sold domestically is used as a weighting agent in oil and gas well drilling fluids. According to the U.S. Geological Survey, shipments of ground barite from Nevada's three mining operations mostly went to Colorado and Wyoming gas drilling customers.

M-I SWACO, which is jointly owned by Smith International and Schlumberger, was the largest Nevada barite producer in 2007. Shipments fell about 10% from about 297,000 tons in 2006 to about 266,000 tons of crude and ground barite from the Greystone Mine and Battle Mountain plant, both in Lander County. The barite of the Greystone Mine is in black chert and minor argillite and shale of the Middle to Late Devonian Slaven Chert.

Baroid Drilling Fluids, a subsidiary of Halliburton Company, was the second largest producer in Nevada, shipping 230,000 tons, up almost 13% from 2006. The company mined barite from the Rossi Mine in Elko County and processed it at the Dunphy Mill in Eureka County. The barite occurs in chert of the Ordovician Vinini Formation.

Baker Hughes INTEQ shipped about 77,000 tons of barite from its Argenta operation near Battle Mountain in Lander County, up almost 8% from 2006. In 2007, Baker Hughes located 21 lode claims 5.5 miles south of the Argenta Mine. The area of these claims has been prospected and drilled for barite in the past and is just east of the old Miller Mine, which produced over 50,000 tons of barite in the 1960s. The barite deposits of the Argenta Mine and the newly claimed area are in black chert and minor argillite and shale of the Middle to Late Devonian Slaven Chert in the upper plate of the Roberts Mountain thrust.

Starting in 2006, M-I SWACO introduced a new grade of barite with lower specific gravity of 4.1 (compared with the American Petroleum Institute specific gravity specification of 4.2) following cost and performance analyses. This was done in an effort to extend barite reserves in Nevada and to hold down future price increases. Since then, Halliburton Company and Heemskirk Canada, Ltd., have also started selling the lighter barite. Heemskirk has leased the Monitor barite property in the Northumberland District of Nye County and plans a future exploration project there to reportedly extend Nevada's barite reserves from the presently estimated 7 years out to 13 years.

Heemskirk produces the lighter barite at their Lethbridge, Alberta, plant augmented by barite from Dunphy, Nevada.

Spirit Minerals, LP, received reclamation and water pollution control permits from the Nevada Division of Environmental Protection for their plans to explore the Big Ledge Mine area in the Snake Mountains of Elko County. Spirit Minerals started mining in December 2007, but had to shut down after 20 days, and is expected to restart in March 2008. Spirit Minerals expects to mine about 250,000 tons of barite ore, and produce 500 tons per day through the Dry Creek jig plant for a total of 50,000 tons annually, which will be shipped to their grinding plant in Evanston, Wyoming. At Evanston, the barite will be ground to API specifications and sold for drilling mud use. The area was explored by Chromalloy American Corporation in the late 1970s and later mined by Circle A Construction Inc. in the 1990s. The barite occurs in argillite and chert of the Ordovician Valmy Formation.

BORATE

The U.S. Geological Survey has kept 2006 and 2007 United States production confidential because only two companies in California produce from domestic sources. However, production expressed as boric acid (B_2O_3) for the ten previous years has ranged between 591,000 and 702,000 tons and averaged 658,000 tons, and consumption has ranged between 258,000 and 616,000 tons and averaged about 500,000 tons. American Borate Company processes borate minerals at the Lathrop Wells mill in Nye County. Until 2005, the feed was colemanite mined from the Billie Mine in Death Valley, California. In 2007, the material processed was from overseas. The Nevada plant has a 22,000-ton annual capacity (boric acid), but its production is not included in the estimate of total value of Nevada minerals because the ore originates out of state.

CEMENT

According to the U.S. Geological Survey, United States cement production declined almost 3% to about 106.3 million tons in 2007. For the ten years up to 2005, production increased over 25%, but has declined almost 4% since then. Consumption was almost 127 million tons in 2007 with the difference between production and consumption made up by imports mainly from Canada, China, and Thailand. Consumption increased almost 17% between 2002 and 2005, but declined over 10% by 2007. The average mill

price was about \$92.50 per ton in 2007, which is only slightly more than in 2006. The price ranged between \$68.04 and \$72.12 per ton between 1998 and 2004 but then increased over 28% by 2007. The drop in consumption is largely due to the severe decline in the housing market, though government spending on transportation infrastructure has remained strong.

The concern over carbon dioxide emissions is a major environmental issue that is in part being addressed by the partial use of noncarbonate sources of calcium oxide in clinker manufacture and the partial substitution of supplementary cementitious material such as pozzolan in cement and concrete. The high cost of fuel and an inability to pass on the entire cost increase is stimulating the installation of more fuel-efficient kilns and increased use of waste materials as fuels.

The only Nevada producer, the Nevada Cement Company (part of Eagle Materials, Inc., of Dallas, Texas) in Fernley, Lyon County, has annual production of about 600,000 tons of cement. The cement is manufactured from Tertiary lacustrine limestone mined a few miles south of Fernley, and from other raw materials that come from northern Nevada. At the end of 2006 and in early 2007, the company located a group of over 100 lode claims adjacent to Buffalo Mountain in the Antelope Springs mining district less than 20 miles east of Lovelock. This area is underlain by massive limestone and dolomite of the Triassic Natchez Pass Formation. Nevada Cement also located another 73 lode claims adjacent to their existing operating limestone quarry south of Fernley.

Eagle Materials, Inc., stated that its four cement plants in Illinois, Nevada, Texas, and Wyoming operated at full capacity throughout 2007. Plans for a new cement plant near Lovelock were put on hold, but because the reserves at the quarry south of Fernley are running low, plans to open a new limestone quarry at the west base of the Humboldt Range about 25 miles northeast of Lovelock will proceed. The plan of operations proposes mining 1 to 1.5 million tons of limestone annually for 50 years.

Eagle Materials plans to spend \$320 million expanding and modernizing its plants in Nevada and Wyoming, which will add 1 million tons of annual cement production. Construction at the Fernley facility, which was originally expected to start in the first half of 2008 but has now been delayed 1 to 2 years, will include replacing the existing Portland cement manufacturing facility with a new single kiln with a five-stage preheater. The Fernley plant, built in 1964, has a rated annual clinker capacity of 505,000 tons.

Ash Grove Cement Company, a Kansas corporation, had announced plans for a major cement plant northeast of Las Vegas on the Moapa Indian Reservation in 2004 with plant construction slated to begin in late 2007. However, disagreements with the newly elected tribal government resulted in the cancellation of this project.

CLAY

According to data from the Nevada Division of Minerals, Nevada clay production was an estimated 32,000 tons in 2007, about the same as in 2006. This production does not include halloysite clay mined in Washoe County for Nevada Cement.

In 2007, IMV Nevada, owned by Mud Camp Mining Company, LLC, produced about 28,500 tons of sepiolite, saponite, and bentonite from deposits in the Ash Meadows-Amargosa Flat area of Nye County. This is down 5% from 30,000 tons produced in 2006. The clay occurs in shallow, flat-lying deposits in Pliocene lacustrine rocks. It is processed at a plant in Amargosa Valley, and clay products are exported worldwide. The sepiolite and saponite deposits have unusual geology, they are considered to have originated in a Pliocene playa with an area of at least 22 square miles. The sepiolite, which yields most of the profits for the operation, occurs in an almost continuous bed with an average thickness of about 7 feet. IMV Nevada is the only commercial producer of sepiolite and saponite in North America.

Two companies campaign mine and ship relatively minor amounts of Nevada clay from several sites for use in high-value specialty products. At its White Caps Mill near Beatty in Nye County, Vanderbilt Minerals Company processes small amounts of clay stockpiled from several deposits in Nevada, Arizona, and California. In 2007, the company did not actively mine but did ship smectite from the New Discovery Mine just south of Beatty, the Blanco Mine about 40 miles west-southwest of Tonopah in the Coaldale mining district in Esmeralda County, and the Buff and Satin Mines about 10 miles northeast of Lovelock in the Willard mining district in Pershing County.

The American Colloid Company mined and shipped white bentonite from its Nassau property in Coal Canyon in the Willard mining district for use in specialty clay products. The clay is in altered rhyolite tuff-breccia of probable Miocene-Pliocene age. American Colloid also mines several thousand tons of hectorite every few years from their Disaster Peak Mine in the Disaster mining district about 30 miles west of McDermitt in Humboldt County. The hectorite is in moat deposits of the McDermitt

Caldera, which are discussed more in the section on lithium. The Disaster Peak Mine did not produce in 2007.

The Art Wilson Company mined halloysite on an as-needed basis for the Nevada Cement Company, which owns the pit in the Terraced Hills about 8 miles northwest of Pyramid Lake. Because of its high alumina content, it is used in the production of Portland cement at the Nevada Cement Company plant at Fernley. Production is kept confidential, but the gross proceeds reported to the Department of Taxation were almost \$622,000 in 2007.

Calico, LLC, filed a plan of operations for their Barrett Springs Project about 10 miles northwest of Winnemucca. Calico proposes to deepen an existing clay pit on their group of five placer claims by about 10 feet to take in an additional 22,000 cubic yards of montmorillonite clay, which would be mined as needed over the next 20 years.

DIATOMITE

The United States is the largest producer of diatomite worldwide. According to the U.S. Geological Survey, domestic production decreased nearly 14% to an estimated 787,000 tons of diatomite in 2007 valued at \$162 million. Consumption decreased 16% to about 604 million tons, and exports, which account for about 21% of production, decreased 5% to about 164 million tons. U.S. production was from seven companies with twelve mining areas and nine processing facilities operating in California, Nevada, Oregon, and Washington with California and Nevada dominating production. The average price at the plant in 2007 was about \$215 per ton, which was about the same as in 2006. For the last 10 years, the price has ranged between \$200 and \$249 per ton and averaged about \$226 per ton. Nevada usually accounts for than 30% of domestic annual production. About two-thirds of the diatomite produced in Nevada is used in filtration and the remainder is largely used in absorbents, fillers, and cement. Emerging small-scale uses include pharmaceutical processing and nontoxic insecticides.

EP Minerals, LLC, a subsidiary of Eagle Picher Corporation, and the second largest diatomite producer in the world, produces most of Nevada's diatomite. EP Minerals' Colado operation in Pershing County is the company's most productive Nevada operation. It consists of a plant at Lovelock that mostly makes filtration products from diatomite mined about 15 miles to the northwest in the Velvet mining district. The diatomite occurs in thick layers interbedded with fresh-water tuffaceous sedimentary rocks of probable Miocene age. The company also produces diatomite used in fillers

and absorbents at its Clark plant and mine in Storey County about 20 miles east of Reno and produces diatomite used in insulation from a pit near Hazen in Lyon County. The diatomite at Clark occurs with diatomaceous shale and thin beds of volcanic tuff within the Miocene-Pliocene Kate Peak Formation and is about 90% composed of the diatom *Melosira granulata*.

Celite Corporation operates a mine at Hazen and plant in Fernley that produce diatomite fillers. The company planned to start mining at their Nightingale deposit north of Fireball Ridge in Churchill County in 2008. Celite is a subsidiary of World Minerals Inc., the world's largest diatomite producer and a subsidiary of Imerys, a large French industrial minerals company.

The Moltan Company ships absorbent products, cat litter, and soil conditioner under several labels from a mine and plant complex in Churchill County about 20 miles northeast of Fernley in the Desert mining district. The diatomite deposits mined for this operation are Pliocene interbedded lacustrine tuffaceous shale, sandstone, limestone, and siliceous tuff in western Churchill County.

The Grefco diatomite operation near the Esmeralda/Mineral County line is small relative to other Nevada diatomite companies but has produced diatomite used in filters for many years. The deposit is in Miocene-Pliocene lacustrine sedimentary rocks consisting of diatomite, argillaceous and calcareous diatomite, clay, sand, and volcanic ash. The main diatoms are *Melosira granulata*, *Stephanodiscus aslraea*, and *Eunotia robusta*. Since 2004, production has come from stockpiled ore.

In 2006, DRP Minerals proposed to mine diatomite in the Panaca mining district just north of State Route 319, about a mile east of Panaca. Phase 1 would involve mining about 5 acres on the southwest end of the deposit, which is in lacustrine rocks of the Pliocene Panaca Formation. The deposit has been mined periodically since 1936, but mostly between 1959 and 1966. As of 2007, a completed plan of operation had not yet been submitted to the U.S. Bureau of Land Management.

DIMENSION STONE

Mt. Moriah Stone Quarries, LLC, quarries quartzite of several colors from the Cambrian Prospect Mountain Quartzite at a quarry about 15 miles north of Baker in White Pine County. This material, which naturally splits into large slabs, is used for flagstone, ashlar (uncut facing stone), and other types of uncut building stone. Mt. Moriah Stone plans to expand a 5-acre quarry to 50 acres. The company completed an environmental

assessment, and the Forest Service issued a finding of no significant impact in 2007. However, a performance bond was not posted, and the U. S. Bureau of Land Management did not approve the project. Mt. Moriah will continue to mine from the smaller pit and may pursue the expansion in the future. In late 2007, Mt. Moriah general manager, Clay Iverson, located eight placer claims in the area already quarried by Mt. Moriah.

Las Vegas Rock produces flagstone, ashlar, boulders, and crushed landscape rock from its Rainbow Quarries near Goodsprings, about 20 miles southwest of Las Vegas. The stone is mined from the Jurassic Aztec Sandstone. In 2007, Las Vegas Rock staked two millsites near Interstate 15 and the railroad about 3 miles north-northeast of Jean.

Nevada Rock, LLC, of Carson City dropped the seven placer claims located in 2006 in the Jessup Mining district about 30 miles northeast of Fernley.

GEMSTONES

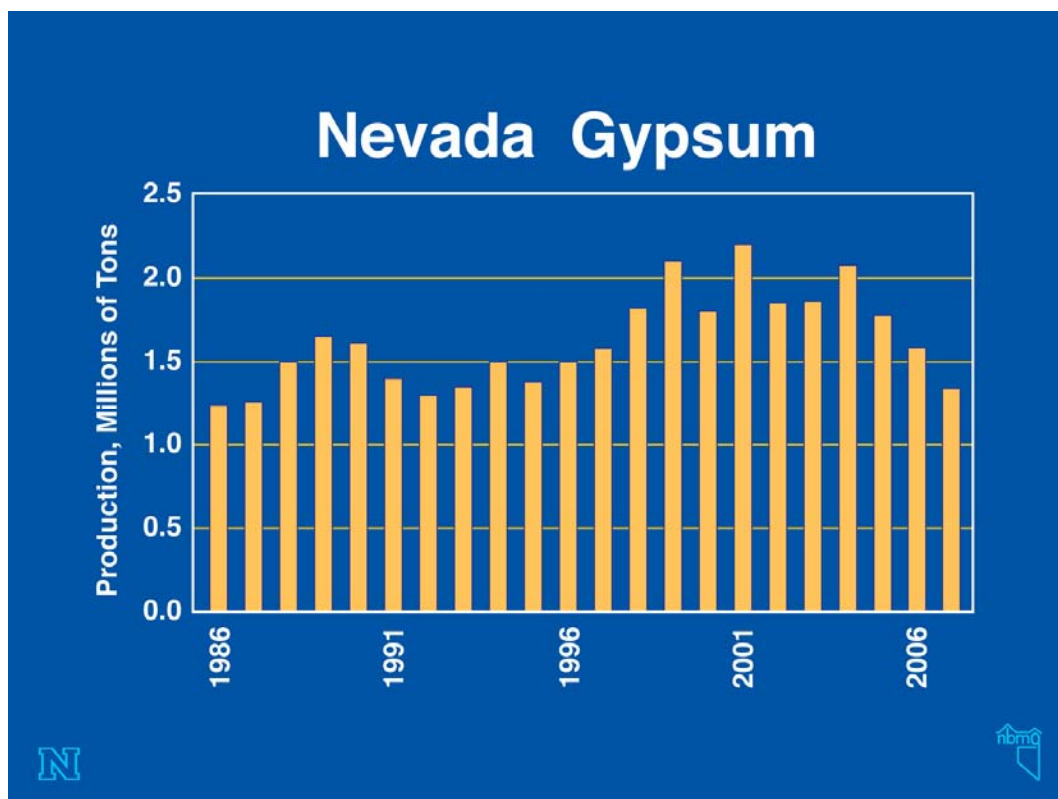
Precious opal is produced from several mines in the Virgin Valley area of northern Humboldt County. Virgin Valley is a well-known source of gemstones in North America. The best known mines there are the Royal Peacock, Rainbow Ridge, Bonanza, and Hidden Valley Mines. The Rainbow Ridge and Royal Peacock Mines produced in 2007 from pay-to-dig operations.

Nevada has also probably produced more than \$30 million worth of turquoise, mostly during the first half of the twentieth century when as much as 10,000 pounds were produced in a single year. In 2007, less than 100 pounds of turquoise was shipped from the Blue Ridge Mine, a family-owned property in the Bullion mining district of Lander County.

GYPSUM

According to the U.S. Geological Survey, the United States, the world's leading producer, produced an estimated 18.8 million tons of crude gypsum in 2007 valued at \$134 million. Apparent consumption had increased about 34% from 2001 to 2006, but in 2007, it decreased about 37% to 29 million tons, the lowest since 1994, as a result of the declining housing and construction markets. The difference between production and consumption was mostly made up by imports mainly from Canada and some from

Mexico, which decreased to 9.6 million tons in 2007. In 2007, the price of crude gypsum decreased 12% to \$7.11 per ton from the mine after increasing 24% between 2003 and 2006. For the previous ten years, the price had ranged between \$6.26 and \$8.25 per ton and averaged \$6.74 per ton. The flat housing market has kept demand constant. Production of synthetic gypsum was about 8.8 million tons in 2007 and has been flat for a couple of years. However, the construction of new large wallboard plants and the continued expansion of existing facilities that began in 2005 using synthetic gypsum may result in the use of less mined gypsum.



In 2007, Nevada was third behind Oklahoma and Iowa among the eight states which produce 77% of the country's total gypsum. According to data from the Nevada Division of Minerals, Nevada's gypsum production, at an estimated 1.35 million tons, declined for the fourth year in a row. This decline was the result of cessation of mining in 2004 at the BPB Blue Diamond operation south of Las Vegas and a drop in production from the state's current two largest producers.

PABCO Gypsum in Clark County northeast of Las Vegas was the largest Nevada producer in 2007. Production fell about 20% to about 1.15 million in 2007 from about 1.44 million tons of gypsum ore in 2006. PABCO Gypsum processes the gypsum into wallboard at their plant adjacent to their mining operation. Processing yields about 70% by weight gypsum from the ore, which is in a nearly flat-lying late Miocene gypsite

blanket atop a 5-square-mile mesa. Drilling indicates the gypsum is at least 120 feet thick in the area of current mining.

USG, the nation's largest wallboard producer, was the second largest Nevada producer in 2007. Production fell about 17% to about 307,000 tons in 2007 from over 369,000 tons in 2006. The company mines gypsum in western Pershing County and processes it into wallboard and plaster at a plant at Empire in Washoe County. The gypsum is of Triassic or Jurassic age and forms several masses in a 2-square-mile area. The largest mass, the Selenite orebody, contains 85 to 95% gypsum.

The Art Wilson Company of Carson City produced about 140,500 tons of gypsum and anhydrite from the Adams Mine in Lyon County an increase of about 16% from about 121,600 tons produced in 2006. The D. L. Denman Construction Company mines gypsum at the Pioneer Mine about 10 miles east of Las Vegas. Material from these relatively small operations is used in cement and agricultural applications. The Adams deposit is a folded body associated with limestone in Triassic metavolcanic rocks. The Pioneer Mine exploits the same late Miocene gypsite deposit as the PABCO operation about 5 miles to the north.

Meadow Valley Gypsum received a reclamation permit from the Nevada Division of Environmental Protection for its Meadow Valley Gypsum Project, also referred to as the Thrasher Gypsum Mine, in Lincoln County about 25 miles north of Moapa. An environmental assessment is currently in preparation. The project calls for an open pit and associated facilities, dump, and stockpiles on 12 acres with production lasting about five years.

LIME, LIMESTONE, AND DOLOMITE

According to the U.S. Geological Survey, United States production of quicklime and lime hydrate fell about 4% to 22.3 million tons valued at \$1.8 billion in 2007. Nevada was sixth on the list of seven states that each produce more than 1 million tons annually and collectively produce 63% of the country's total. In 2007, the average price at the plant for quicklime and hydrate increased about 7% each to \$76.70 per ton and \$92.90 per ton respectively. Nevada has two large lime producers and several small carbonate rock producers.

Nevada's largest producer, the Pilot Peak high-calcium lime operation of Graymont Western US, Inc. (formerly Continental Lime, Inc.) operates in the Proctor

mining district in the Toano Range about 10 miles northwest of Wendover in Elko County. Pilot Peak mainly markets lime to gold-mining operations for use in cyanide-solution pH control. The plant has three kilns with a combined capacity of more than 700,000 tons of quicklime per year and a hydrated lime plant capable of producing 350 tons per day. In addition to lime, Pilot Peak also shipped crushed limestone. Production is mainly from the Middle to Late Devonian Guilmette Formation, which generally consists of interbedded limestone and dolomite but typically contains a thick sequence of micritic high-calcium lime. In 2007, Graymont located a group of about 150 placer claims mostly adjacent to their other claims. These claims are mainly underlain by limestone and dolomite of the Guilmette Formation and some Silurian through older Devonian formations.

Nevada's other large producer, Chemical Lime Company, produces lime at Apex in the Apex mining district about 20 miles northeast of Las Vegas. The operation makes high-calcium quicklime used in metallurgical processing, paper manufacturing, and environmental markets. The company also produces dolomitic lime and hydrated high calcium lime at Apex, mainly for construction uses. The company's Henderson plant processes quicklime into Type S hydrated dolomitic lime for building and home construction. In addition to lime, Chemical Lime also shipped crushed limestone. Production is from the Middle to Late Devonian Sultan Limestone. The composition of the Sultan Limestone is generally: the lower member (Ironside Dolomite) is mostly dolomite; the middle member (Valentine Limestone) ranges from more than half limestone to mostly dolomite; and the upper member (Crystal Pass limestone) is nearly pure limestone.

The Nutritional Additives Corporation produces agricultural and nutritional dolomite products from operations located along the northwest edge of the Sonoma Range about five miles south of Winnemucca. Production is from the Late Triassic Dun Glen Formation, which consists mainly of massive black dolomite with minor limestone and shale in its lower section. Min-Ad, Inc., a subsidiary of Inter-Rock Minerals Inc. of Toronto, Canada, also produced dolomite from the Dun Glen Formation about three miles south of the Nutritional Additives Corporation operation. Their dolomite is mostly sold to clients in the U.S. Midwest and as far as New York State and Alberta, Canada, for use in beef and dairy feed. Min-Ad's production fell almost 9% in 2007 after increasing steadily by about 70% over the previous ten years. Along with gypsum and anhydrite, the Art Wilson Company of Carson City also produced some pure calcitic

limestone from the Adams Mine. The limestone is used for soil pH control and reportedly contains no detectable magnesium.

Ireland, Inc., entered into merger agreements with Columbus Brine, Inc., and Columbus S. M., LLC, to acquire the Columbus Project at the Columbus Salt Marsh in Esmeralda County about 45 miles west of Tonopah. The project consists of about 43,000 acres of placer claims, 60 acres of mill sites, an approved plan of operations to mine and process on 380 of these acres, and a 15,000 square foot processing plant. The current permit allows for mining down to 25 feet and annual processing of as much as 78,000 short tons of calcium carbonate and precious metals. By the end of 2007, Ireland, Inc., had drilled nine holes exploring for gold.

LITHIUM

According to the U.S. Geological Survey, the estimated United States consumption of lithium decreased 12% to about 2,400 tons in 2007. Nevada is the only state with domestic production of lithium raw materials, and since this production is from one company, actual production and consumption figures are kept confidential to protect company proprietary data.

Subsurface brines have become the dominant raw material for lithium carbonate production worldwide because of low production costs as compared with the mining and processing costs for hard-rock ores. Lithium has been produced as a by-product from brine in California since 1938; however, the Nevada operation initiated at Silver Peak in Esmeralda County in 1966 by Cyprus Foote Mineral Company, was the first to extract lithium as the sole commercial product from brine. This operation was the world's dominant lithium producer until the late 1980s, when a new Chilean lithium brine operation overtook it. Two South American brine operations - one in Chile and one under development in Argentina, now dominate the world lithium market. U.S. lithium imports have increased 50% since 2001, mostly because of growth in lithium-based rechargeable battery sales.

According to the journal *Industrial Minerals*, the price for lithium carbonate delivered in the U.S. held steady at \$2.70–3.00 per pound in 2007 after increasing from \$1.80–2.50 per pound during 2006. The U.S. price for lithium carbonate was about \$2.00 per pound until the late 1990s, when large shipments of lithium carbonate began to be sold from the South American operations at about half the list price. However, prices have risen recently due to increased demand for lithium for battery production.

Chemetall Foote Company, a subsidiary of Chemetall GmbH, now owns and operates the Silver Peak facility. The company produces lithium carbonate, lithium hydroxide monohydrate, and lithium hydroxide anhydrite. The lithium chemicals are preconcentrated by solar evaporation and subsequently refined metallurgically from brine that is pumped from beneath Clayton Valley playa. Production figures are confidential; the most recent public information, from 1998 Securities and Exchange Commission data, showed production of about 12 million pounds of lithium carbonate and 5 million pounds of lithium hydroxide. Through its subsidiary Sociedad Chilena de Lithio, Chemetall GmbH also runs a lithium operation in Antofagasta, Salar de Atacama, Chile. According to *Industrial Minerals* (June 2007), Chemetall is expanding the capacity at Salar de Atacama up to 20% by 2009. No expansion is planned for the Silver Peak facility, which is smaller than and is considered to be a backup plant to Salar de Atacama.

In May 2007, Western Uranium Corporation announced plans to spin off its lithium resources at its Kings Valley Project, Nevada, into a newly incorporated subsidiary called Western Lithium Corporation. According to the company website and NI 43-101 report, Western Uranium controls over 80,000 acres through approximately 3,800 lode claims mainly in the Disaster mining district in northern Humboldt County. The claims are within the McDermitt Caldera, and cover several areas containing inferred uranium resources and broader zones of uranium, molybdenum, and lithium mineralization. Exploration by Chevron in the early 1980s defined over 21 million tons (non-NI 43-101 compliant) of high lithium clays including significant amounts of hectorite in the moat deposits in the western part of the caldera. These lithium-bearing moat deposits extend north through the western Montana Mountains and Disaster Peak into Oregon. Significant lithium mineralization has been defined in five areas referred to as: North Lens, North Central Lens, South Lens, South Central Lens, and PCD. In 1985, Chevron estimated a total resource of about 2.3 million tons of lithium (equivalent to about 12 million tons of lithium carbonate; non-NI 43-101 compliant) with a 0.25% cutoff grade and minimum 5-foot thickness for these areas. In each area, hectorite occurs in thick apparently continuous accumulations with the zones of mineralization varying between about 3 and 300 feet thick. The hectorite is thought to be derived from hydrothermal alteration of the volcanoclastic sedimentary rocks that comprise the moat deposits.

MAGNESIA

According to the U.S. Geological Survey data, the United States production of magnesium compounds increased slightly to about 293,000 tons in 2007 after a cumulative decrease of almost 35% between 1997 and 2006. About 60% of U.S. magnesia production comes from seawater and natural brines, and the rest is produced from magnesite (Nevada), brucite (Texas), and olivine (Washington). Consumption increased about 2% to about 682,000 tons in 2007 with most of the difference between consumption and production being made up by imports from China. Consumption has varied between 643,000 tons and 782,000 tons and averaged 702,000 tons for the last ten years.

Premier Chemicals LLC of Cleveland, Ohio, owns the Gabbs magnesia operation in Nye County, which is the only place in the country where magnesite is currently mined. Magnesite and some brucite (<5%) have been mined at Gabbs since 1935, and in the 1940s were processed in Henderson, Nevada, to make magnesium metal. From the 1950s to the 1980s, mining and processing was by Basic Industries, a major producer of refractory magnesia. During the 1990s, the availability of cheap foreign refractory magnesia caused production at Gabbs to be converted to light-burned (caustic) magnesia that is mainly marketed for wastewater treatment and agricultural uses. Although production of magnesia at Gabbs is still substantially below its peak in 1981, magnesia shipments from the Gabbs operation increased steadily between 1996 and 2005. After a dip in 2006, production rose again in 2007. Production is confidential, but the plant capacity is rated at about 150,000 tons of magnesia per year. The magnesite and brucite occur as complex replacement bodies in Triassic dolomite in an area of about 1,300 acres in the Paradise Range just east of the town of Gabbs. The resource was estimated to be about 13 million tons in 1973 and is thought to be sufficient for more than 50 years of production at present mining rates.

PERLITE

According to the U.S. Geological Survey, the United States production of perlite decreased from about 800,000 tons in 1999 to about 489,000 tons in 2007, the lowest since 1983, probably due to decreased usage in construction and to increased imports. Until 2005 the U.S. was the world's largest producer of perlite, but since then, Greece has been the largest producer. Consumption dropped 2%, and imports dropped over

10% from record levels in 2006. The cost of rail transportation from western U.S. mines to some areas of the eastern U.S. has placed domestic perlite producers at a marked disadvantage compared with Greek perlite exporters. However, U.S. exports to Canada partially offset losses due to competition by foreign imports in the eastern U.S.

Nevada has large perlite resources and several deposits that have been mined extensively; however, the state now produces only minor amounts of perlite. Current perlite production in Nevada is restricted to relatively small-scale mining of two deposits for niche markets, and the state produces less than 1% of the domestic total.

Wilkin Mining and Trucking Inc. mines perlite from the Tenacity Perlite Mine in the South Pahroc Range mining district about 25 miles west of Caliente in Lincoln County. The company has been mining perlite in the area for more than 25 years. The company has a small popping plant in Caliente, and present sales are almost exclusively of expanded perlite that is used for horticultural purposes. The company shipped 1,500 tons in 2007, down 17% from 2006. The deposit consists of a large, flat-lying, 20-foot thick perlite flow with obsidian pellets in Tertiary rhyolitic volcanic rocks, and in the 1950s was estimated to contain a reserve of over 15 million tons.

Noble Perlite produces expanded perlite from a plant in Fallon. The company has eight placer claims about 20 miles south-southeast of Fallon on the south side of the White Throne Mountains, but these claims were not mined in 2007. Noble purchased ore in New Mexico, which was brought in by truck and train. Most of their processed perlite is microspheres used for fillers.

EP Minerals produces a small amount of expanded perlite that is marketed as a filter aid from its Colado diatomite plant in Pershing County. Plant capacity is reportedly about 8,000 tons per year, but 2007 production is not available. The crude perlite comes from the Popcorn Mine about 15 miles south of Fallon in Churchill County, which is usually mined a week or two per year.

POTASSIUM ALUM

A small amount of potassium alum (kalinite) was shipped in 2007 from a deposit in Esmeralda County about 10 miles north of Silver Peak by Rulco. The kalinite, which occurs with sulfur as veins and stringers in rhyolitic rock, is being marketed for horticultural use. Because of increased demand, plans were being made to begin mining in 2008.

POZZOLAN

David Free of Tooele, Utah, submitted a plan of operation and an environmental assessment was completed in 2004 for the Silver Bells Project about 6 miles south of Pioche. The site is on two groups containing 18 placer claims. The White Sands group of 10 claims is estimated to contain about 4 million tons of pozzolanic ash and was mined in the 1950s and 1960s for material used in the construction of Glen Canyon Dam. The pozzolanic ash is volcanic, white and granular when pure, and forms a layer up to 15 feet thick overlying lacustrine rocks of the Pliocene Panaca Formation under generally less than 15 feet of overburden. The project proposed to process up to 100 tons of material per day for up to 12 years to be used for cement additives in southern Nevada and elsewhere in the southwestern United States. The project was permitted, but was on hold in 2007.

SALT

According to data from the Nevada Division of Minerals, the Huck Salt Company produced about 17,000 tons of salt in 2007, up about 12% from 2006. The salt is mainly used for deicing roads, and production levels are dependent on weather. The salt is mined from a playa on Fourmile Flat about 25 miles southeast of Fallon in Churchill County, where it has been harvested almost continuously since the 1860s when it was hauled to the mills that processed Comstock silver and gold ore.

SILICA

According to the U.S. Geological Survey, which reports silica as “Industrial Sand and Gravel”, the United States is by far the world’s largest producer of silica sand. In 2007, domestic production decreased about 5% to about 33 million tons. Between 2002 and 2006, production had steadily increased about 16%, and between 2003 and 2006, consumption had increased about 13%. The average price in 2007 increased about 12% to \$25.95 per ton and has increased steadily about 60% since 1995. About a third of the total is used in manufacturing glass.

According to data from the Nevada Division of Minerals, Nevada's major silica producer, Simplot Silica Products at Overton in Clark County, shipped about 616,000 tons of silica sand in 2007, down about 18% from an average of about 750,000 tons produced in each of the years from 2004 through 2006. The sand is mined from a large open pit in the relatively friable Cretaceous Baseline Sandstone, washed in the pit, and transported via a 5-mile slurry pipeline to a plant where it is screened and bagged. The facility produces four grades of sand based on coarseness, AFS 55, 60, 70, and 100. AFS 70, which is used mainly in manufacturing glass, is the main product. In 2007, Simplot staked three placer claims in addition to the 125 placer claims and one mill site staked in 2006.

American Silica, Inc., a subsidiary of Fitch Industries, produced silica sand from their Mercury Mine about 3 miles southeast of Mercury in Nye County. A plan of operations submitted to the U.S. Bureau of Land Management in 2001 called for annual production of as much as 80,000 tons. The product, which contains about 98% SiO₂, is mainly used as construction sand and is mined from the Ordovician Eureka Quartzite.

In December 2006, the U. S. Bureau of Land Management completed a preliminary environmental assessment for James Hardie Building Products Inc. to expand their Kramer Hill Quartzite Quarry on a 53-acre site about 1.5 miles south of Golconda in Humboldt County. Prior to 2007, 100,000 tons of quartzite from two minerals-material sales were mined, tested, and found suitable as feed for the company's fiber-cement siding manufacturing plant in the Tahoe-Reno Industrial Park east of Sparks, Nevada. The purpose of the expansion is to provide a continuous source of high purity silica quartzite (projected to be as much as 4,000,000 short tons over a 20-year period) for their plant. Early in 2007, James Hardie won approval for the expansion and is allowed to mine up to 200,000 cubic yards (400,000 tons) over a 5-year period under the terms of a non-competitive sales contract. The company would need to renew the contract after 5 years, but can at any time request amounts above the 400,000 ton limit through the competitive bidding process.

VERMICULITE

On March 31, 2006, IBI Corporation of Ontario, Canada, completed an agreement granting a 2-year option for Rio Tinto America Industrial Minerals, Inc., of Australia to acquire IBI's interest in the Mica Peak vermiculite property about 60 miles east-northeast of Las Vegas for \$1,250,000. Rio Tinto paid \$25,000 on signing the

agreement and another \$25,000 in January 2007. The company must spend \$250,000 on exploration and development during the option period. The vermiculite occurs in altered Precambrian mafic and ultramafic rock on three claim blocks that include claims originally staked in 1993 and 1994. The presence of the vermiculite deposits has been known since the 1930s, and a mill was constructed in the 1940s. According to *Industrial Minerals* (February 2007), the estimated recoverable reserves are between 2 and 3 million tons.

ZEOLITES

Nevada contains large known resources of zeolite; however, zeolite production has been small and no zeolite is currently mined in Nevada. In 2007, Zeox Mineral Materials Corporation acquired Ash Meadows Zeolite, LLC, which ships 1,000 to 5,000 tons annually of clinoptilolite used in water filtration, odor control, and nuclear clean-up from their plant in Amargosa Valley in Nye County. The plant also produces zeolite based cement for building materials and oil and gas projects. The clinoptilolite is mined from a small open pit just over the state line in Inyo County, California, in a large area of zeolite deposits that extends into Nevada.

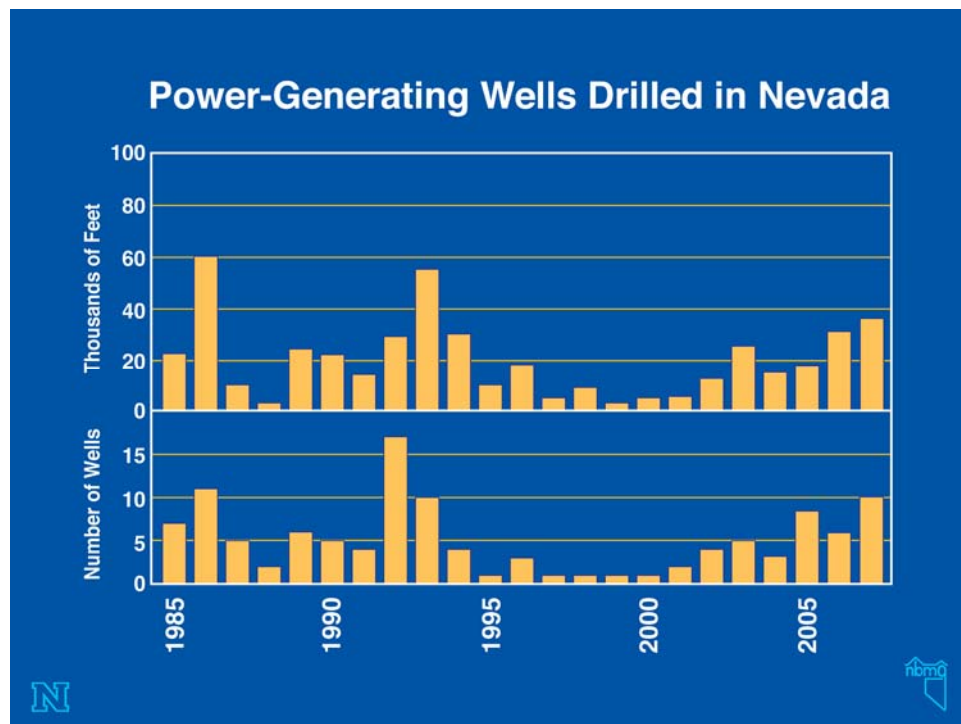
In the past, the Moltan Company has mined small amounts of mordenite in the Trinity Range in Churchill County about 40 miles northeast of Fernley, but none was mined in 2007. The company uses mordenite in the production of absorbent products at its Fernley diatomite plant. Moltan dropped the 12 claims it had located near Ash Meadows in 2006.

KMI Zeolite, Inc. owns a plant in Sandy Valley about 32 miles southwest of Las Vegas and a deposit reportedly containing about 60,000,000 tons of largely clinoptilolite in California about 85 miles northwest of the mill. The mill is capable of producing 55,000 tons per year. In 2006, KMI was planning expanding production capacity, and in 2007, staked nine mill sites in Sandy Valley.

Geothermal Energy

by Ronald H. Hess

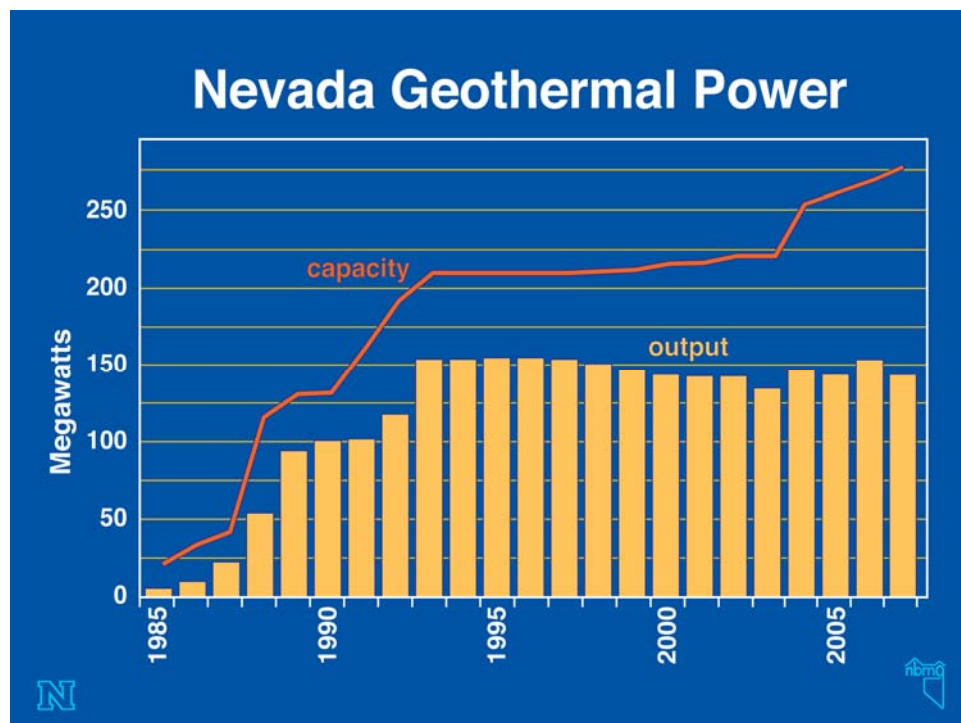
Seventy-two geothermal well permits were issued during 2007 by the Nevada Division of Minerals: 6 project area permits, 22 industrial production well permits, 14 industrial injection well permits, three domestic well permits, 13 gradient well permits, and 14 observation well permits. A total of 41 geothermal wells of all types were reported as drilled during 2007. (Nevada Division of Minerals, 2008)



Industrial-class (power generating) wells drilled in Nevada, 1985–2007. Depth taken from original drilling permit.

In Nevada, during 2007, there were 353 federal leases covering approximately 561,780 acres, an increase from 2006 of 51 leases and 132,791 acres. Total lease rental revenue value for 2007 was \$602,980, an increase from the previous year of \$232,980. In comparison, during 2007, there were 753,056 acres of geothermal leases on federal lands nationwide with the acreage under lease in Nevada accounting for 75% of that total. During 2007, total lease sale income in Nevada was \$11.7 million with \$5.85 million going to the State of Nevada, \$2.925 million going to the counties where the acreage is located, and \$2.925 million going to the Department of Interior to help support the geothermal program. (Rich Hoops, BLM, oral commun., 2008)

Total gross electrical production during 2007 from Nevada geothermal resources on public lands was 1.2 million megawatt-hours (MWh), an increase of 40,000 MWh from 2006; net production was approximately 980,000 MWh, a decrease of 15,800 MWh over 2006. Gross electrical sales from federal lands in 2007 were \$53.7 million, a decrease of \$1.9 million from 2006. Geothermal production royalties for Nevada were \$2 million in 2007. By regulation, half of all federal geothermal lease rental fees and production royalties are returned to the state. For 2007, \$301,490 in lease rental fees and \$1,000,000 in royalty production fees should be returned to Nevada. (Rich Hoops, BLM, oral commun., 2008)



Currently developed resource capacity and average net output of Nevada geothermal plants, 1985–2007. Average net output is annual sales in megawatt-hours divided by the number of hours in a year (8,760). No commercial geothermal power was produced in Nevada before 1985.

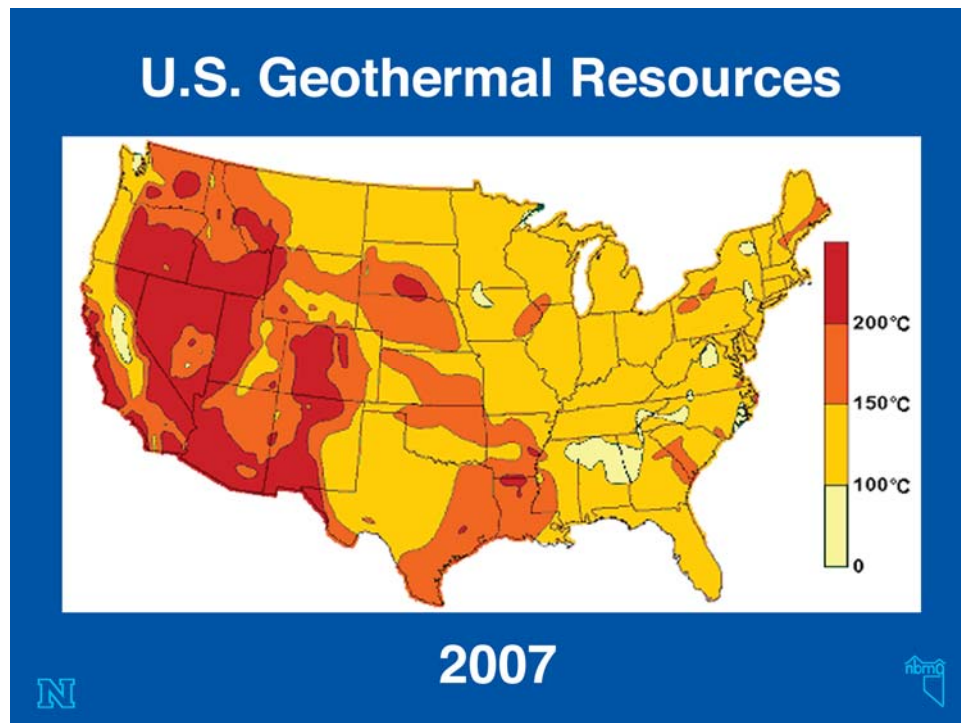
Total Nevada geothermal electrical production in 2007 from federal and fee lands combined was 1,585,138 MWh gross and 1,243,096 MWh net (Nevada Division of Minerals, 2008) with an approximate sales value of \$69.4 million. This was a decrease in gross production of 98,447 MWh and in net production of 89,901 MWh from 2006. Production capacity from the currently developed geothermal resources at ten existing geothermal power production sites in Nevada is 277.1 megawatts (MW), a 12.4 MW

increase from 2006. Currently installed equipment, or nameplate, capacity for the same sites totals 297.3 MW. The table of Nevada geothermal power plants lists operators, plant locations, and energy production for individual Nevada geothermal power producers at the end of 2007. Nevada is second only to California in total installed geothermal generating capacity.

In a new report titled “Update on Near-Term Geothermal Potential in Nevada,” Nevada’s near-term geothermal-energy generation potential is between 1,730 and 2,179 MW. It is believed that under suitable political, regulatory, and economic conditions this geothermal potential could be brought online using existing technology by 2015. If these resources are brought online by 2015, they would represent approximately 20% of Nevada’s demand in the year 2015. (Update on Near-Term Geothermal Potential in Nevada by Lisa Shevenell, Christy Morris, and David Blackwell, Geothermal Resources Council Bulletin, Vol. 37, No. 3, May/June 2008)

To further encourage the production of renewable energy in Nevada, Governor Jim Gibbons established, by executive order, the Nevada Renewable Energy Transmission Access Advisory Committee (RETAAC) and named the 14 members that constitute the committee. The Advisory Committee recommends to the Governor those actions that are needed to improve Nevada’s energy transmission infrastructure to insure available access and capacity for Nevada’s future renewable energy producers. Its members work with the Governor’s energy advisor, Dr. Hatice Gecol. The committee includes representatives from key renewable energy industries and interest groups that will work together to further that development.

The Nevada Division of Minerals and the Nevada Bureau of Mines and Geology have developed the *Renewables of Nevada* interactive map website showing geothermal, solar, wind, and biomass potential maps for Nevada along with a variety of other land-use, restricted lands, and base-map data sets. This website can be accessed at <http://134.197.46.82/renewables/> .



Geothermal resources map of the United States (2007) showing the estimated subterranean temperatures at a depth of 6 kilometers. To estimate the Earth's internal temperature at any depth below the capabilities of normal well drilling, multiple data sets are synthesized. The data used for this figure are: thermal conductivity, thickness of sedimentary rock, geothermal gradient, heat flow, and surface temperature. (U.S. Department of Energy - Energy Efficiency and Renewable Energy Geothermal Technologies Program, original author SMU Geothermal Lab 2007, <http://smu.edu/geothermal/>).

BLUE MOUNTAIN GEOTHERMAL AREA, HUMBOLDT COUNTY

The Nevada Geothermal Power, Inc. (NGP) Blue Mountain project area covers approximately 17.2 square miles in Humboldt County, Nevada. NGP signed a fixed-price, date-certain engineering, procurement, and construction (EPC) contract with Ormat Technologies Inc. to construct the Blue Mountain Faulkner I binary geothermal power plant (phase 1, 35 MW gross) by December 31, 2009. As well field development drilling has moved forward, it now appears that the Blue Mountain geothermal resource should be able to support power production at the level of 49.5 MW gross. The contract for the construction of phase 1 has been modified for a 49.5 MW power plant.

NGP has also received approval to construct a 20-mile long 120 kV overhead transmission line, which will connect to the existing electric grid just north of Mill City with an approved capacity for up to 75 MW of production. The path of the transmission

line transverses a checker board of land ownership that is approximately 50% private land and 50% public land administered by the Bureau of Land Management. Power plant construction is expected to begin late in 2008. NGP has completed four production wells and expects to drill one to two more production wells and four injection wells in 2008. The Blue Mountain area is located at T36N, R34E in south-central Humboldt County, Nevada. (Blue Mountain Geothermal Project, Nevada Geothermal Power, Inc., website: <http://www.nevadageothermal.com/s/BlueMountain.asp> and Status of Resource Development at the Blue Mountain Geothermal Project, Humboldt County, Nevada, produced by GeothermEx, Inc., http://www.nevadageothermal.com/i/pdf/GeothermExBlueMtResourceReport_21Apr08_rev2.pdf)

STEAMBOAT HOT SPRINGS, WASHOE COUNTY

The Galena No. 3 plant, Ormat's newest binary geothermal power plant at Steamboat Hot Springs, was placed online in 2007. The addition of this new plant brings the gross power production from the Steamboat Hot Springs area up to approximately 100 MW. Sierra Pacific Power Co., Sierra Pacific Resources northern Nevada utility, and ORNI 14 LLC, a subsidiary of ORMAT Nevada, Inc., signed a 20-year 20-MW Power Purchase Agreement (PPA) for the Galena No. 3, project. At present, there are no new power plants planned for the Steamboat area.

BLACK WARRIOR GEOTHERMAL AREA, WASHOE AND CHURCHILL COUNTIES

The Nevada Geothermal Power, Inc. (NGP) Black Warrior project area is located southeast of Black Warrior Peak, Washoe and Churchill Counties (T23N, R25E). The project area covers seven square miles of leased private ground, including surface and water rights, and one square mile of federal ground. Work done by Phillips Petroleum in the early 1980s indicated a potential for the discovery of a geothermal reservoir suitable for electric power generation based on temperature gradients found to be greater than 200°C/km throughout the leased area, as measured in ten widely spaced drill holes. Based on a 2005 GeothermEx Inc., report this area is estimated to have a potential of producing 37 MW. (Black Warrior Project, Nevada Geothermal Power, Inc., website: <http://www.nevadageothermal.com/s/BlackWarrior.asp> and Great Basin Center for

Geothermal Energy, Current Geothermal Exploration Activity:

<http://www.unr.edu/geothermal/explactivity.htm>)

HOT SULPHUR SPRINGS, ELKO COUNTY (TUSCARORA)

TG Power LLC is moving forward with the development of a 48-MW-net power plant at Hot Sulphur Springs. The plant will consist of six separate turbine generators using conventional water cooling towers instead of air-cooled condensers. To supply the water needed for the cooling towers TG Power has obtained a ground-water use permit for up to 6,400 gpm. TG Power has obtained financing to begin drilling a series of production and injection wells. The drilling program will also better define the existing resource potential for the project. Total cost of the project will be between \$125 and \$180 million. (Sparks Tribune, Saturday, Dec. 1, 2007, Vol. 98, No. 335)

Earlier exploration of this field, as described by F.E. Berkman (The Tuscarora, Nevada, Geothermal Prospect - a case history, November 17, 1980, NBMG geothermal files), identified this geothermal area as located on the west side of the Independence Mountains at the north end of the Independence Valley graben. The geothermal area includes six springs, one geyser, and one fumarole. These occur in a narrow zone approximately 3 km long within the Midas fault zone. Waters from the hot springs were analyzed and subsurface temperatures of 228°C and 167°C (442°F and 333°F) were indicated by the Na-K-Ca and silica geothermometers.

In an AMAX Exploration, Inc., Tuscarora Area, Nevada, Final Report, (August 1981, NBMG files), H.D. Pilkington reported that a test discovery well, with a total depth of 5,454 feet, encountered a low-temperature reservoir. There was some difficulty in completing the well due to some lost circulation zones. Drilling on the well had to be stopped short of target and before a high temperature reservoir was discovered. The well was flow tested at approximately 1,200 barrels per hour with temperatures ranging from 69° to 108°C (156° to 225°F).

In 2003-2004 Earth Power Resources, which had the lease on the resource rights at that time, discovered a geothermal resource over 166°C (330°F) between the depths of 2,950 and 3,810 feet. Eventually this lease was transferred to TG Power LLC.

DESERT PEAK GEOTHERMAL AREA, CHURCHILL COUNTY

Ormat Nevada, Inc. announced that work has begun on an Enhanced Geothermal System (EGS) project using an existing sub-commercial well, DP 27-15, to demonstrate the technology's potential to generate substantial levels of additional electricity. This technology is intended to increase the production of a well by enhancing the permeability of the reservoir rocks in the well making it possible to extract additional heat from the reservoir. This project has been funded and developed by Ormat, the US Department of Energy (DOE), the Great Basin Center for Geothermal Energy, GeothermEx Inc., Idaho National Laboratory, Lawrence Berkeley National Laboratory, Sandia National Laboratory, University of Utah EGI, TerraTek, Pinnacle Technologies, and U.S. Geological Survey. Partial support for the project includes \$1.6 million in direct DOE funding. (Nevada Geothermal Update, Nevada Division of Minerals, May 2008, http://minerals.state.nv.us/forms/ogg/ogg_NGU/NVGeothermalUpdate2008.05clm.pdf)

SAN EMIDIO AND GRANITE CREEK GEOTHERMAL AREAS, WASHOE COUNTY

U.S. Geothermal, Inc. announced the completion of a transaction with Michael Stewart and Empire Geothermal Power to acquire the Empire geothermal power plant and 28,358 acres of geothermal leases and ground water rights. The total purchase price for the power plant and acreage was \$16.62 million. The transaction includes assets from two locations, San Emidio and Granite Creek. San Emidio includes the Empire power plant and approximately 22,944 acres of leases and ground-water rights. The Granite Creek assets are 5,414 acres of BLM leases about 6 miles north of Gerlach, Nevada. U.S. Geothermal plans to develop a 27-megawatt power project for the San Emidio resource with a drilling program to begin in 2008 and the plant to be online around 2011. This \$75 to \$85 million plan calls for the construction of twin binary cycle plants. It is anticipated that the current well field could provide approximately 75% of the geothermal fluid requirement for one of the binary plants and an expanded production and injection well field could be drilled to provide the balance of the needed geothermal fluid for the second plant to make, in total, the 27-megawatt development. (U.S. Geothermal, Inc. <http://www.usgeothermal.com> and Nevada Geothermal Update, Nevada Division of Minerals, May 2008, http://minerals.state.nv.us/forms/ogg/ogg_NGU/NVGeothermalUpdate2008.05clm.pdf)

GRASS VALLEY AREA, LANDER COUNTY

Ormat Technologies, Inc. announced that it had signed a 20-year Power Purchase Agreement (PPA) with Nevada Power Company for energy that will be produced from the Grass Valley Geothermal Power Plant to be built in Lander County Nevada. The plant will have a gross output of between 18 and 30 MW, (<http://www.ormat.com/investor-relations/news-releases/>). The site is in the vicinity of Hot Springs at Hot Springs Point, on the west side of Grass Valley. A series of gradient and observation well permits were issued, and some have been drilled. The wells are in Sections 15, 16, and 21 of Township 24 North, Range 47 East. In 2005 Ormat ran chemical analyses on 90.5°C hot spring discharge that indicated a potential 177°C reservoir temperature based on silica geothermometry. Ormat developed a geologic model that indicates a concealed fault may exist 760 meters northeast of the hot springs. It is probable that hot water circulating up this fault is providing the source fluids for the nearby hot springs. (Geothermal Resources of Nevada, Hot Springs at Hot Springs Point (Grass Valley) (updated Mar. 2006) on the Web at <http://www.nbmng.unr.edu/geothermal/site.php?sid=Hot%20Springs%20at%20Hot%20Springs%20Point>).

EIGHT MILE FLAT (SALT WELLS), CHURCHILL COUNTY

On March 20, 2007 Enel North America, Inc. purchased AMP Resources, LLC. from AMP Capital Partners and a minority investor. Enel North America, Inc. is a subsidiary of Enel S.p.A., Italy. The Nevada Division of Minerals has issued a geothermal project area permit (#698PA) to Enel Salt Wells, LLC to drill up to eight production wells with estimated depths of 1,000 feet, eight injection wells with estimated depths of 3,000 feet, and 10 observation wells. The project area is located in Sections 23, 24, 25, 26, 35, and 36 of Township 17 North, Range 30 East. A transmission line to the site of the proposed 26-MW power plant near Salt Wells has been completed. (Great Basin Center for Geothermal Energy, Current Geothermal Exploration Activity: <http://www.unr.edu/geothermal/explactivity.htm>)

STILLWATER GEOTHERMAL AREA, CHURCHILL COUNTY

AMP Resources, LLC. purchased the Stillwater Power Plant and associated geothermal resources from Stillwater Holdings, LLC., effective 12/31/2004. In August 2005 AMP Resources applied to the Nevada Public Utilities Commission (PUC) for a permit to construct a 37-MW binary geothermal power plant adjacent to the existing Stillwater power plant. In May 2006 the PUC approved a permit to build a 26-MW power plant. Upon completion, the new power plant will replace the existing Stillwater plant, online since 1989, which will be dismantled. When the new plant is completed, it will be known as Stillwater 2 Geothermal Power Plant. On November 16, 2007 Enel Stillwater, LLC received a special use permit from Churchill County to construct the Stillwater 2 power plant. Well level monitoring, to be reviewed annually, a hydraulic model to be supplied to the county that will show subsurface water dynamics, and noise restrictions were included as part of the approval conditions for the special use permit.

GEOTHERMAL BIBLIOGRAPHY AND WEB LINKS TO OTHER GEOTHERMAL INFORMATION

The U.S. Department of Energy (DOE) Geothermal Technologies Program and the DOE Office of Scientific and Technical Information (OSTI) have scanned approximately 3,300 agency and national lab technical reports. These files are in a PDF, full text searchable, format and accessible online at <http://www.osti.gov/energycitations/> . For further information on geothermal resources in Nevada check the following websites or contact Ron Hess at 775-784-6692 or via Email at rhess@unr.edu:

- ❖ Map of Geothermal Resources in Nevada (second edition), NBMG Map 141, available online in pdf file format:
<http://www.nbmj.unr.edu/dox/m1412.pdf> .
- ❖ Nevada Commission on Minerals, Nevada Division of Minerals at
<http://minerals.state.nv.us/> .
- ❖ Nevada Bureau of Mines and Geology Geothermal Resources of Nevada website at <http://www.nbmj.unr.edu/geothermal/gthome.htm> .
- ❖ Great Basin Center for Geothermal Energy
<http://www.unr.edu/geothermal/>. This site contains geothermal exploration

data, interactive maps, lease and incentive program information, and numerous geothermal digital data sets.

- ❖ GEO-HEAT CENTER, at <http://geoheat.oit.edu/> , Oregon Institute of Technology, Klamath Falls, Oregon. This site focuses on direct use applications of geothermal energy.
- ❖ DOE/INEEL Geothermal Resource Location Maps for 13 Western States in pdf, jpg, and e00 file formats at <http://geothermal.id.doe.gov/maps/index.shtml> .
- ❖ The Nevada Geothermal Resources map in pdf file format is found at <http://geothermal.id.doe.gov/maps/nv.pdf> .
- ❖ The Renewable Resource Data Center (RReDC) provides access to an extensive collection of renewable energy resource data, maps, and tools. Geothermal, biomass, solar, and wind resource data for locations throughout the United States can be found on the RReDC site at <http://www.nrel.gov/rredc/> .
- ❖ Geothermal biz.com <http://www.geothermal-biz.com/> is part of the U.S. Department of Energy-led GeoPowering the West (GPW) initiative to dramatically increase the use of geothermal energy in the western United States, Alaska, and Hawaii.
- ❖ Southern Methodist University Geothermal Lab, specializing in geothermal gradient data and maps of the entire country, post information at <http://www.smu.edu/geothermal/>.
- ❖ Summary of Supporting Data for USGS Regional Heat-flow Studies of the Great Basin, 1970-1990, by John H. Sass, Susan S. Priest, Arthur H. Lachenbruch, S. Peter Galanis, Jr., Thomas H. Moses, Jr., John P. Kennelly, Jr., Robert J. Munroe, Eugene P. Smith, Frederick V. Grubb, Robert H. Husk, Jr., and Charles W. Mase; USGS Open-File Report 2005-1207 online version 1.0 on the Web at <http://pubs.usgs.gov/of/2005/1207/>
- ❖ Geothermal Industry Temperature Profiles from the Great Basin, by John H. Sass, Susan S. Priest, Arnold J. Blanton, Penelope C. Sackett, Stephanie L. Welch, and Mark A. Walters; USGS Open-File Report 99-425 online version 1.0 on the Web at <http://pubs.usgs.gov/of/1999/of99-425/webmaps/home.html>

- ❖ The Bureau of Land Management Land and Mineral Records-LR2000 system Web address is <http://www.blm.gov/lr2000/>
- ❖ GeoCommunicator is the publication site for the Bureau of Land Management's National Integrated Land System (NILS).
GeoCommunicator provides searching, accessing and dynamic mapping of data for federal land stewardship, land and mineral use records, and land survey information. GeoCommunicator provides spatial display for land and mineral cases from BLM's LR2000 system. The Web address for the GeoCommunicator is <http://www.geocommunicator.gov/> .

NEVADA GEOTHERMAL POWER PLANTS 2007

Plant name (year on line)	Production capacity ¹ (MW)	2007 Production (MWh)		Location	Operator
		Gross	Net (sales)		
Beowawe (1985)	16.7 (16.6)	118,286	102,669	S13,T31N,R47E	Caithness Operating Beowawe Power, LLC 9590 Prototype Ct., #200 Reno, NV 89521 (775) 850-2266
Bradys Hot Springs (1992)	26.1 (26.1)	146,645	99,120	S12,T22N,R26E	Brady Power Partners/ Desert Peak P.O. Box 649 Fernley, NV 89408 (775) 423-5800
Desert Peak (1985) Desert Peak II (2006) ²	23 (23)	112,424	86,064	S21,T22N,R27E	Brady Power Partners
Dixie Valley (1988)	66.0 (62.0)	529,295	480,600	S7,T24N,R37E S33,T25N,R37E	Caithness Dixie Valley, LLC 9590 Prototype Ct., #200 Reno, NV 89521 (775) 850-2266
Empire (1987)	4.6 (4.8)	27,482	18,887	S21,T29N,R23E	Empire Energy, LLC P.O. Box 152 Gerlach, NV 89412 (775) 557-2015
Soda Lake No. 1 (1987) Soda Lake No. 2 (1991)	16.6 (26.1)	97,460	64,152	S33,T20N,R28E	AMOR IX 5500 Soda Lake Road Fallon, NV 89406 (775) 867-5093
Steamboat I, I-A (1986) Steamboat II, III (1992) Galena (2005) Galena 2 (2007)	95.4 (101.0)	421,033	308,133	S29,T18N,R20E	ORMAT Nevada 1010 Power Plant Road Reno, NV 89502 (775) 852-1444
Steamboat Hills (1988, formerly Yankee Caithness)	14.5 (14.5)	37,760	27,878	S5,6,T17N,R20E	ORMAT Nevada
Stillwater (1989)	13.0 (21.0)	85,678	49,382	S1,T19N,R30E S6,T19N,R31E	Enel Stillwater 4785 Lawrence Lane Stillwater, NV 89406 (775) 329-0700
Wabuska (1984)	1.2 (2.2)	9,075	6,211	S15,16,T15N,R25E	Homestretch Geothermal 1147 N. Daybreak Dr. Washington, UT 84780 (435) 668-6003
TOTAL	277.1 (297.3)	1,585,138	1,243,096		

¹ Production capacity from currently developed geothermal resources (equipment capacity in parentheses). Sources: Plant operators, Nevada Division of Minerals, and NBMG files.

² Desert Peak II is a new binary power plant that was built to replace the original steam turbine power plant at Desert Peak, which was permanently shut down on May 1, 2006. The new power plant came on-line on August 1, 2006 with a generation capacity of 23 MW, twice that of the original power plant.

NONDOMESTIC GEOTHERMAL WELLS REPORTED AS DRILLED, REDRILLED, OR COMPLETED DURING 2007

Area	Company Name	Well Type and Number	Permit Number	Location	Permitted Depth (ft)	
Churchill County						
Eight Mile Flat Area	Carson Lake Basin Project	O 58-9	680	NW/4, NE/4, S. 16, T17N, R30E	2,500	
	Carson Lake Basin Project	O 34-33	682	SE/4, NW/4, S. 33, T17N, R30E	2,500	
	Carson Lake Basin Project	O 86-15	683	NE/4, SE/4, S. 15, T17N, R30E	2,500	
	Carson Lake Basin Project	O 17-16	685	SW/4, SW/4, S. 16, T17N, R30E	2,500	
	Enel Salt Wells, LLC	I 54-36	733	SE/4, NE/4, S. 36, T17N, R30E	1,500	
	Enel Salt Wells, LLC	I 63-36	734	SW/4, NE/4, S. 36, T17N, R30E	1,500	
Stillwater	Enel Stillwater, LLC	I 26-7	706	NW/4, SW/4, S. 7, T19N, R31E	1,400	
	Enel Stillwater, LLC	I 63-7	707	SW/4, NE/4, S. 7, T19N, R31E	1,400	
Elko County						
Hot Sulphur Springs (Tuscarora Geothermal Area)	TG Power, LLC	O 87-5	674	SE/4, SE/4, S. 5, T41N, R52E	3,500	
	TG Power, LLC	P 65-8		675 NE/4, SE/4, S. 8, T41N, R52E	4,000	4,000
	TG Power, LLC	P 57-8	689	NW/4, SE/4, S. 8, T41N, R52E	4,000	
	TG Power, LLC	P 72-8	690	NE/4, NE/4, S. 8, T41N, R52E	4,000	
	TG Power, LLC	P 53-8	716	SW/4, NE/4, S. 8, T41N, R52E	5,000	
Humboldt County						
Blue Mountain	Noramex Corp.(NV Geothermal Power)	P 23-14	635	SW/4, NW/4, S. 14, T36N, R34E	6,000	
	Noramex Corp.(NV Geothermal Power)	P 25-14	637	NW/4, SW/4, S. 14, T36N, R34E	6,000	
Lander County						
Buffalo Valley	Ormat Nevada Inc.	TG BV-1	644	SW/4, SW/4, S. 22, T29N, R41E	500	
	Ormat Nevada Inc.	TG BV-2	645	SW/4, NW/4, S. 27, T29N, R41E	500	
	Ormat Nevada Inc.	TG BV-3	646	NE/4, SE/4, S. 27, T29N, R41E	500	
	Ormat Nevada Inc.	TG BV-4	647	SE/4, SE/4, S. 34, T29N, R41E	500	
	Ormat Nevada Inc.	TG BV-5	648	NW/4, SE/4, S. 35, T29N, R41E	500	
	Ormat Nevada Inc.	TG BV-6	649	NE/4, NW/4, S. 26, T29N, R41E	500	
	Ormat Nevada Inc.	TG BV-7	650	SW/4, SW/4, S. 25, T29N, R41E	500	
	Ormat Nevada Inc.	TG BV-8	651	NE/4, SE/4, S. 25, T29N, R41E	500	
	Ormat Nevada Inc.	TG BV-10	653	NE/4, SE/4, S. 24, T29N, R41E	500	
	Ormat Nevada Inc.	O 31-26 (42-26)	665	NE/4, NW/4, S. 26, T29N, R41E	3,000	
	Ormat Nevada Inc.	TG BV-11	694	SE/4, NW/4, S. 25, T29N, R41E	1,000	
Grass Valley	Ormat Nevada Inc.	O 67-16	660	SW/4, SE/4, S. 16, T24N, R47E	3,000	
Reese River	Sierra Geothermal Power, Inc.	O 56-4	667	NW/4, SE/4, S. 4, T23N, R43E	4,000	
	Sierra Geothermal Power, Inc.	TG 13-4(38-33)	711	SW/4, NW/4, S. 4, T23N, R43E	6,000	
Pershing County						
Jersey Valley	Ormat Nevada Inc.	O 81-28	655	NE/4, NE/4, S. 28, T27N, R40E	3,000	
	Ormat Nevada Inc.	O 18-27 (88-28)	656	SE/4, SE/4, S. 28, T27N, R40E	3,000	
	Ormat Nevada Inc.	O 33-33	658	SE/4, NW/4, S. 33, T27N, R40E	3,000	
Nye County						
Darroughs Hot Springs Area	Truckee Geothermal No. 1 SV-01, LLC	P 68-04	696	SW/4, SE/4, S. 4, T12N, R43E	4,000	
Washoe County						
Steamboat Hot Springs	Ormat Nevada Inc.	P 44A-32	668	SE/4, NW/4, S. 32, T18N, R20E	1,000	
	Ormat Nevada Inc.	P 14A-33	669	SE/4, NW/4, S. 33, T18N, R20E	1,000	
	Ormat Nevada Inc.	PI 43-33	670	SE/4, NW/4, S. 33, T18N, R20E	1,000	
	Ormat Nevada Inc.	I 14-33	708	SW/4, NW/4, S. 33, T18N, R20E	2,500	
	Ormat Nevada Inc.	I 23-33	710	SW/4, NW/4, S. 33, T18N, R20E	2,500	
Warm Springs Valley	Newcore Energy, LLC	O Marshall No. 1	744	NW/4, NE/4, S. 22, T23N, R20E	3,000	

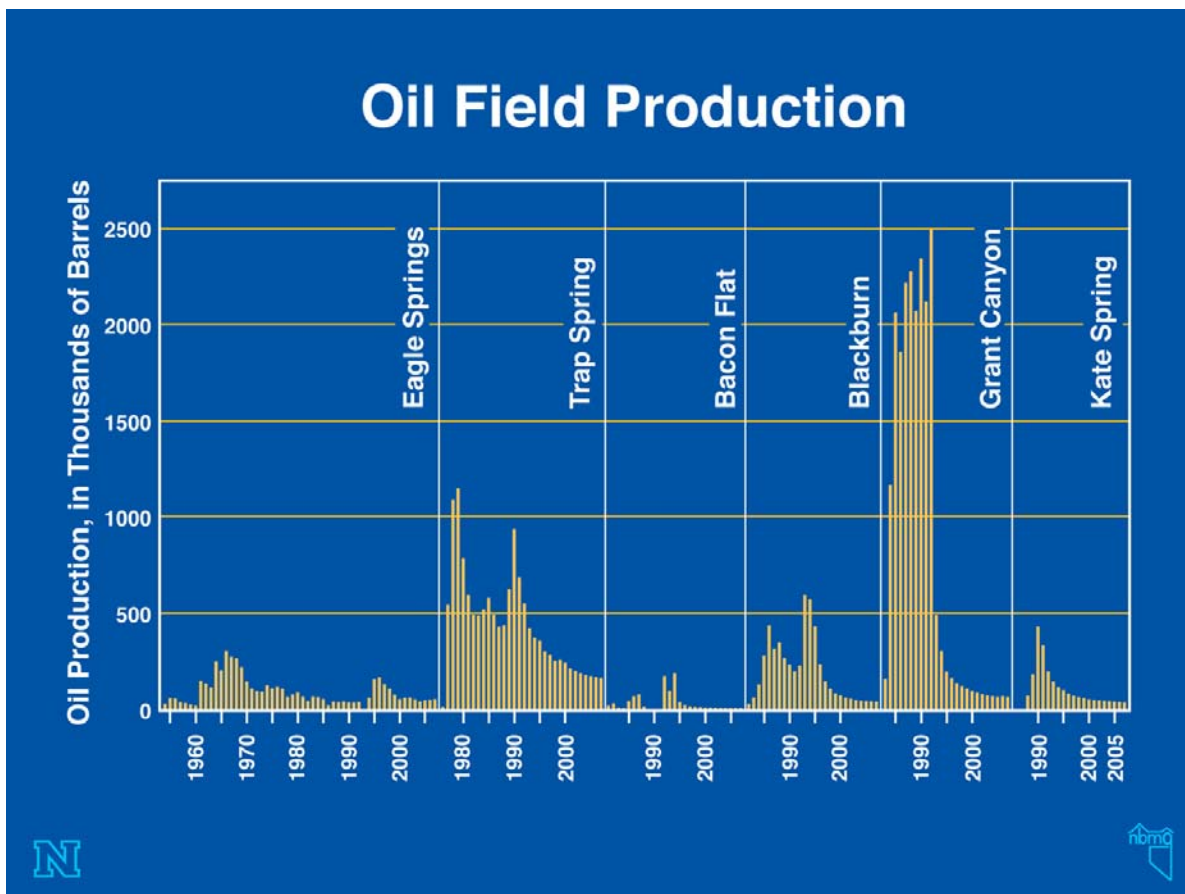
¹ I = injection well; O = observation well; P = production well; TG = thermal gradient well.

Oil and Gas

by David A. Davis

PRODUCTION

According to the Nevada Division of Minerals, Nevada's net oil production in 2007 was 408,174 barrels (0.022% of total U.S. production), which was down over 4% from 2006. Production came from 65 actively producing wells in ten fields in Railroad Valley (Nye County, 89.5%), six wells in two fields in Pine Valley (Eureka County, 10.0%), and 1 well in Elko County (0.5%). One other minor field was shut in throughout 2007, and two other minor fields are now plugged and abandoned. Nevada ranked 26 out of the 31 oil producing states in the country in 2007 (<http://www.eia.doe.gov>). According to the Department of Taxation, the average per barrel net wellhead price for Nevada crude oil was \$55.63, which was an increase of almost 10% from \$50.77 in 2006. The sales volume (or gross yield) increased 9% to \$23,544,547 in 2007 from \$21,613,073 in 2006.



PRODUCTION OF NEVADA'S OIL FIELDS (barrels)

Compiled from Producer's Reports filed with the Nevada Division of Minerals

Field (year discovered)	1954-1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Eagle Springs (1954) (Railroad Valley)	4,729,674	82,067	59,394	67,024	67,908	57,946	45,176	54,362	54,706	56,922	5,275,179
Trap Springs (1976) (Railroad Valley)	12,109,118	263,566	246,725	218,198	206,424	193,191	181,937	170,896	163,301	159,821	13,913,177
Currant (1979) (Railroad Valley)	1,351	28	55	33	21	23	9	3	0	81	1,604
Bacon Flat (1981) (Railroad Valley)	901,306	16,849	14,766	13,898	12,647	11,763	10,612	7,556	8,112	8,301	1,005,810
Blackburn (1982) (Pine Valley)	4,694,264	89,400	78,136	66,899	62,412	54,623	51,372	45,369	41,491	39,477	5,223,443
Grant Canyon (1983) (Railroad Valley)	20,253,067	112,715	102,113	92,899	85,722	79,293	73,879	68,944	70,158	62,236	21,001,026
Kate Spring (1986) (Railroad Valley)	1,844,242	65,315	57,644	55,198	53,408	49,698	45,656	44,288	41,124	38,411	2,294,984
Tomera Ranch (1987) (Pine Valley)	21,580	398	488	0	11,901	1,981	124	0	0	0	36,472
North Willow Creek (1988) (Pine Valley)	44,201	123	146	144	573	349	377	2,064	2,552	1,256	51,785
Three Bar (1990) (Pine Valley)	23,837	0	0	0	0	0	0	0	0	0	23,837
Duckwater Creek (1990) (Railroad Valley)	15,321	93	116	968	869	436	200	185	122	150	18,460
Sans Spring (1993) (Railroad Valley)	219,919	11,127	6,990	6,356	5,532	4,775	4,169	3,324	3,265	2,971	268,428
Ghost Ranch (1996) (Railroad Valley)	212,552	49,348	41,454	36,173	31,814	26,129	36,423	37,874	30,256	26,070	528,093
Deadman Creek (1996) (Elko County)	367	0	0	0	0	0	0	0	0	0	367
Sand Dune (1998) (Railroad Valley)	12,465	15,122	12,624	13,461	14,211	13,123	13,124	11,878	10,618	10,562	127,188
Toano Draw (2007) (Elko County)										1,916	1,916
Total	45,083,264	706,151	620,651	571,251	553,442	493,330	463,058	446,743	425,705	408,174	49,771,769
Change from previous year		-12%	-12%	-8%	-3%	-11%	-6%	-4%	-5%	-4%	

Production from Nevada's 72 actively producing wells ranged between 3 and 149 barrels of oil per day and 0 and 2,470 barrels of water per day. They averaged 17 barrels of oil per day and 271 barrels of water per day. Thirty-four wells were strippers, and 21 produced more than 20 barrels of oil per day. Twenty-two wells produced less than 50 barrels of water per day, and eight produced more than 500 barrels of water per day.

Ninety-nine wells in 13 fields were listed as producers in 2007. Of these, 27 were shut in for the entire year. At year's end, one well had been shut in for 6 to 12 months. Four formerly shut in wells, one in each of the years 2005, 2001, 1996, and 1993, were

brought back on line in 2007. Four wells have been shut in four one to five years. The rest have been shut in from over five to 19 years.

Nevada's highest volume producer was Grant Canyon No. 9, which averaged 149 barrels of oil and 423 barrels of water per day during 2007, decreases of 14% and 36% respectively from 2006 production. Grant Canyon No. 9 has held this ranking since 1996. Kate Spring No. 1A moved ahead of Trap Spring No. 9 as Nevada's second highest volume producer in 2007. Kate Spring No. 1A averaged 57 barrels of oil and 439 barrels of water per day in 2007, increases of 2% and 22% respectively over 2006 production. Trap Spring No. 9 averaged 51 barrels of oil and 1,601 barrels of water per day in 2007, decreases of 12% and 5% respectively since 2006.

The Bacon Flat Field, which produces from the Devonian Guilmette Formation (predominantly carbonate rocks) between about 4,960 and 5,350 feet, averaged about 23 barrels of oil and about 6 barrels of water per day in 2007 and accounted for 2% of Nevada's total oil production. Oil production increased 2% and water production decreased 56%. Only one of its three producers was active. One well has been shut in since 1993 and the other since 1988.

PRODUCTION OF WATER FROM NEVADA'S OIL FIELDS (barrels)

Compiled from Producer's Reports filed with the Nevada Division of Minerals

Field (year discovered)	1994-2000	2001	2002	2003	2004	2005	2006	2007	Total
Eagle Springs (1954)	2,301,566	421,755	572,541	538,814	357,021	428,375	501,462	804,428	5,925,962
Trap Spring (1976)	20,160,693	2,648,176	1,844,621	1,802,383	1,727,583	2,427,226	2,298,300	2,371,513	35,280,495
Currant (1979)	0	0	0	0	0	0	0	0	0
Bacon Flat (1981)	710,888	613	27	5,080	3,479	4,694	4,899	2,153	731,833
Blackburn (1982)	13,404,427	1,792,102	2,008,218	1,805,820	10,728,237	1,840,581	1,537,556	1,582,937	34,699,878
Grant Canyon (1983)	2,227,179	431,433	435,004	425,905	438,911	391,017	506,854	442,826	5,299,129
Kate Spring (1986)	3,572,108	515,205	457,264	451,878	417,030	424,809	416,752	437,983	6,693,029
Tomera Ranch (1987)	211,089	0	94,643	169,487	23,393	0	0	0	498,612
North Willow Creek (1988)	2,660	50	0	52	97	268	83	0	3,210
Three Bar (1990)	5,958	0	0	0	0	0	0	0	5,958
Duckwater Creek (1990)	51,224	4,778	4,442	2,503	1,013	1,410	855	1,350	67,575
Sans Spring (1993)	1,955,985	324,585	326,943	290,961	317,230	238,854	261,500	244,756	3,960,814
Ghost Ranch (1996)	685,807	188,592	155,714	123,897	254,781	569,511	641,022	690,599	3,309,923
Deadman Creek (1996)	0	0	0	0	0	0	0	0	0
Sand Dune (1998)	109,758	34,369	32,123	32,624	30,807	31,935	27,043	31,044	329,703
Toano Draw (2007)								25,614	25,614
Total	45,399,342	6,361,658	5,931,540	5,649,404	14,299,582	6,358,680	6,196,326	6,635,203	96,831,735
Change from previous year		-7%	-7%	-5%	153%	56%	-3%	7%	

The Blackburn Field, which produces from the Oligocene Indian Well Formation (tuff and tuffaceous sandstone), Mississippian Chainman Shale (sandstone), and Devonian Nevada Formation (carbonate) between about 6,700 and 6,750 feet, averaged about 11 barrels of oil and about 4,746 barrels of water per day in 2007 and accounted for about 10% of Nevada's total oil production. Oil production decreased 5% and water production increased 13%. Of the five active producers, oil production increased in three and decreased in two. One of the two inactive producers has been shut in since 2001. The other, except for a brief production period in November 2005, has been shut in since 1998.

The Eagle Springs Field, which produces from Oligocene ignimbrites, the Eocene Sheep Pass Formation (lacustrine carbonates), and the Pennsylvanian Ely Limestone between about 5,780 and 7,360 feet, averaged about 156 barrels of oil and about 2,204 barrels of water per day in 2007 and accounted for 14% of Nevada's total oil production. Oil and water increased less than 4% and 60% respectively. Of the 16 active producers, oil production decreased in 10 and increased in five. One well that had been shut in since November 1996 came back on line in January 2007. One well was shut in for one month. Of the five inactive producers, one has been shut in since 2004, three have been shut in since 1997, and one since 1986.

The Ghost Ranch Field, which produces from the Devonian Guilmette Formation between about 4,350 and 4,620 feet, averaged 71 barrels of oil and 1,892 barrels of water per day in 2007 and accounted for about 6% of Nevada's total oil production. Oil production decreased 14% and water production increased 8%. Oil production decreased in three and increased in one of the four producers.

The Grant Canyon Field, which produces from the Devonian Guilmette Formation between about 2,160 and 4,300 feet, averaged 192 barrels of oil and 1,388 barrels of water per day in 2007 and accounted for 15% of Nevada's total oil production. Oil and water production decreased 11%, and 13% respectively. Of the three active producers, oil production decreased in two. The third, which had been shut in since December 1993, came back on line in October 2007. The one inactive producer has been shut in since 1992.

The Kate Spring Field, which produces from the Tertiary Horse Camp Formation (landslide breccia) and the Devonian Guilmette Formation between about 4,450 and 4,820 feet, averaged 105 barrels of oil and 1,282 barrels of water per day in 2007 and accounted for about 9% of Nevada's total oil production. Oil production decreased 7%, and water production increased 5%. Oil production increased in one and decreased in

two active producers. Of the two inactive producers, one has been shut in since 1997 and the other since 1993. A total of 4,476 thousand cubic feet of gas was produced from the Kate Spring Field in 2007, a decrease of 10% from 2006. The gas is used to operate production and related equipment at the lease sites of Makoil, Inc., and Western General, Inc.

The Sand Dune Field's only producer, which produces from Permian and Pennsylvanian limestone between about 5,970 and 6,200 feet, averaged 29 barrels of oil and 85 barrels of water per day in 2006 and accounted for about 2% of Nevada's total oil production. Oil production decreased less than 1% and water production increased 14%.

The Sans Spring Field's only active producer, which produces from the Oligocene Garrett Ranch Group (volcaniclastic rocks and ignimbrites) between about 5,640 and 5,770 feet, averaged 8 barrels of oil and 671 barrels of water per day in 2007 and accounted for less than 1% of Nevada's total oil production. Oil and water production both decreased 9%. Of the two inactive producers, one has been shut in since 1998 and the other has been temporarily abandoned since 1993.

The Trap Spring Field, which produces from the Oligocene tuff of Pritchards Station between about 3,210 and 4,950 feet, averaged 438 barrels of oil and 6,497 barrels of water per day in 2007 and accounted for 39% of Nevada's total oil production. Oil production decreased 2%, and water production increased 3%. Oil production decreased in 27 active producers, increased in six, and stayed the same in one. One well that had been shut in since January 2001 came back on line in January 2007. One well was shut in for four months, and one well was shut in for all 12 months, though it produced in December 2006. Of the nine inactive producers, one been shut in since 2003, one since 1999, two since 1998, two since 1996, one since 1992, one since 1991, and one since 1986.

Three minor fields accounted for less than 0.4% of Nevada's total oil production. The Currant Field's only production well produced from the Eocene Sheep Pass Formation between about 6,850 and 7,080 feet. It produced 81 barrels in 2008 after being shut in since 2005. Currant produced no water. Oil and water production from the Duckwater Creek Field's only producer, which produces from the Oligocene Garrett Ranch Group between about 5,680 and 5,830 feet, increased 23% and 58% respectively. Oil production from the North Willow Creek Field's only active producer, which produces from the Mississippian Chainman Shale between about 6,290 and

6,470 feet, increased 51%, and water production decreased to 0 from 83 barrels. North Willow Creek Field's one inactive producer has been shut in since 2002.

STATUS OF NEVADA OIL AND GAS PRODUCTION WELLS IN 2007

This table gives the amount of oil and water produced and the number of production days in 2007. The sources of information include well records and statistics from the Nevada Division of Minerals. Status abbreviations with dates of the action where applicable: BBL-barrels; MCF-thousand cubic feet; N/A-not available; PA-plugged and abandoned; Prod-production; SI-shut-in; WD-water disposal

Field/Operator/Well	Nevada Permit	Date Completed	Status	Location	Production Oil (BBL)	Production Water (BBL)	Production Gas (MCF)	Production Days
EAGLE SPRINGS (Nye Co., 1954)								
Meritage Energy Co., LLC								
Eagle Springs Federal No. 44-35	813	05/98	SI 2004	SE/4, NW/4, S35, T9N, R57E	0	0		0
Eagle Springs Federal No. 54-35	726	10/94	Prod	SW/4, NE/4, S35, T9N, R57E	3,720	24,032		356
Eagle Springs Unit No. 1-34	107	07/67	SI 1986	SE/4, NE/4, S34, T9N, R57E	0	0		0
Eagle Springs Unit No. 1-35	4	05/54	WD 1978	NE/4, NW/4, S35, T9N, R57E	0	0		0
Eagle Springs Unit No. 1-36	76	02/65	Prod	SW/4, NE/4, S36, T9N, R57E	1,610	24,564		270
Eagle Springs Unit No. 2-36	80	07/65	Prod; SI 1996-2006	NW/4, SE/4, S36, T9N, R57E	3,522	207,248		322
Eagle Springs Unit No. 4-36	86	10/65	SI 1997	NW/4, SE/4, S36, T9N, R57E	0	0		0
Eagle Springs Unit No. 5-36	94	04/66	Prod	NW/4, NE/4, S36, T9N, R57E	4,608	18,458		354
Eagle Springs Unit No. 15-35	21	07/55	Prod; SI 1995-2002	NW/4, SW/4, S35, T9N, R57E	2,413	24,222		344
Eagle Springs Unit No. 35-35	17	03/55	Prod	NE/4, SW/4, S35, T9N, R57E	1,693	20,535		364
Eagle Springs Unit No. 43-36	83	08/65	Prod	NE/4, SE/4, S36, T9N, R57E	1,615	26,703		324
Eagle Springs Unit No. 62-35	46	01/60	Prod	NW/4, NE/4, S35, T9N, R57E	2,150	76,757		357
Eagle Springs Unit No. 73-35	69	10/63	Prod	SE/4, NE/4, S35, T9N, R57E	8,413	76,209		363
Eagle Springs Unit No. 74-35	71	04/64	Prod; SI 1998-2001	SE/4, NE/4, S35, T9N, R57E	2,496	81,407		353
Eagle Springs Unit No. 84-35	77	01/65	SI 1997	SE/4, NE/4, S35, T9N, R57E	0	0		0
Eagle Springs/Plains Petroleum No. 13-36	744	02/96	Prod	SW/4, NW/4, S36, T9N, R57E	3,697	23,959		334
Eagle Springs/Plains Petroleum No. 23-36	733	10/95	Prod	SW/4, NW/4, S36, T9N, R57E	2,867	22,263		358
Eagle Springs/Plains Petroleum No. 24-36	737	11/94	Prod	SW/4, NW/4, S36, T9N, R57E	2,815	1,892		286
Eagle Springs/Plains Petroleum No. 55-35	761	11/95	SI 1997	SW/4, NE/4, S35, T9N, R57E	0	0		0
Eagle Springs/Plains Petroleum No. 64-35	755	09/95	Prod	SW/4, NE/4, S35, T9N, R57E	2,552	21,198		353
Eagle Springs/Plains Petroleum No. 82-35	734	10/94	Prod	NE/4, NE/4, S35, T9N, R57E	4,337	103,285		360
Eagle Springs/Plains Petroleum No. 83-35	754	07/95	Prod	SE/4, NE/4, S35, T9N, R57E	8,431	51,713		329
TRAP SPRING (Nye Co., 1976)								
J.N. Oil and Gas Federal No. 1	449	09/85	PA 1999	NE/4, NW/4, S34, T9N, R56E				
Frontier Exploration Co.								
Munson Ranch No. 13-1	435	08/85	Prod	SE/4, NW/4, S13, T9N, R56E	3,600	5,461		364
Munson Ranch No. 13-45	547	08/89	Prod	NW/4, SW/4, S13, T9N, R56E	2,431	2,739		358
Munson Ranch No. 13-46	548	07/89	SI 1992	NE/4, SW/4, S13, T9N, R56E	0	0		0
Munson Ranch No. 14-33	513	07/89	Prod	NW/4, SE/4, S14, T9N, R56E	2,212	2,825		365
Munson Ranch No. 14-49	550	08/89	Prod	NE/4, SE/4, S14, T9N, R56E	1,673	1,612		363
Munson Ranch No. 14-49X	562	02/90	Prod	NE/4, SE/4, S14, T9N, R56E	465	34		361
Trap Spring No. 14-42	523	10/88	Prod	SE/4, NE/4, S14, T9N, R56E	2,205	3,268		414
Makoi, Inc.								
Britton No. 13-21	224	04/78	SI 1991	NE/4, NW/4, S13, T9N, R56E	0	0		0
East Inselberg No. 36-33	860	04/05	SI 2006	NW/4, SE/4, S36, T10N, R56E	0	0		0
Munson Ranch No. 12-14	688	05/95	Prod	SW/4, SW/4, S12, T9N, R56E	377	0		91
Munson Ranch No. 12-23	596	11/90	SI 1998	NE/4, SW/4, S12, T9N, R56E	0	0		0
Munson Ranch No. 12-24	432	04/85	Prod	SE/4, SW/4, S12, T9N, R56E	5,161	14,506		363
Munson Ranch No. 12-32	559	12/89	Prod	SW/4, NE/4, S12, T9N, R56E	10,258	33,560		356
Munson Ranch No. 12-33	423	03/85	SI 1996	NW/4, SE/4, S12, T9N, R56E	0	0		0
Munson Ranch No. 12-34	406	10/84	Prod	SW/4, SE/4, S12, T9N, R56E	5,490	5,799		360
Munson Ranch No. 12-42	572	06/90	SI 1998	SE/4, NE/4, S12, T9N, R56E	0	0		0
Munson Ranch No. 12-44X	445	07/85	SI 1999	SE/4, SE/4, S12, T9N, R56E	0	0		0
Munson Ranch No. 13-11	622	11/91	SI 2003	NW/4, NW/4, S13, T9N, R56E	0	0		0
Munson Ranch No. 13-11R	840	11/01	Prod	NW/4, NW/4, S13, T9N, R56E	5,171	26,720		365
Munson Ranch No. 13-14	623	09/91	Prod; SI 2001-2006	SW/4, SW/4, S13, T9N, R56E	9,392	142,043		357
Munson Ranch No. 13-21X	640	05/92	Prod	NE/4, NW/4, S13, T9N, R56E	5,143	24,851		352
Munson Ranch No. 13-24	218	08/79	Prod	SE/4, SW/4, S13, T9N, R56E	193	87		63
Munson Ranch No. 13-31	382	07/84	Prod	NW/4, NE/4, S13, T9N, R56E	5,417	24,127		365
Munson Ranch No. 13-32	373	08/84	Prod	SW/4, NE/4, S13, T9N, R56E	6,162	36,477		365
Munson Ranch No. 13-33	211	11/78	Prod	NW/4, SE/4, S13, T9N, R56E	1,898	5,466		360
Munson Ranch No. 13-41X	448	09/85	Prod	NE/4, NE/4, S13, T9N, R56E	11,702	75,491		365
Munson Ranch No. 13-42	222	11/78	Prod	SE/4, NE/4, S13, T9N, R56E	986	51,417		190
Munson Ranch No. 14-23	313	08/81	Prod	NE/4, SW/4, S14, T9N, R56E	2,590	29,121		365
Munson Ranch No. 14-24	354	10/83	SI 1996	SE/4, SW/4, S14, T9N, R56E	0	0		0
Munson Ranch No. 14-32	455	09/87	Prod	SW/4, NE/4, S14, T9N, R56E	5,312	101,801		361
Munson Ranch No. 14-34	287	11/80	Prod	SW/4, SE/4, S14, T9N, R56E	793	14,012		99
Munson Ranch No. 14-34X	522	08/88	Prod	SW/4, SE/4, S14, T9N, R56E	2,582	2,732		364
Munson Ranch No. 14-41	538	07/89	Prod	NE/4, NE/4, S14, T9N, R56E	5,697	69,559		365
Munson Ranch No. 14-44	528	08/89	Prod	SE/4, SE/4, S14, T9N, R56E	3,544	70,394		359
Trap Spring No. 2	185	02/77	Prod	SE/4, SW/4, S27, T9N, R56E	7,810	743		365
Trap Spring No. 3	188	04/77	Prod	NW/4, NE/4, S34, T9N, R56E	11,427	901,637		365
Trap Spring No. 8	196	09/77	Prod	SE/4, SW/4, S23, T9N, R56E	141	194		49
Trap Spring No. 9	197	09/78	Prod	NW/4, NW/4, S26, T9N, R56E	18,233	584,678		361
Trap Spring No. 16	232	09/78	Prod	NW/4, SE/4, S23, T9N, R56E	1,903	137,014		356
Trap Spring No. 19	219	12/77	Prod	SE/4, NW/4, S23, T9N, R56E	18,082	3,085		365
Trap Spring No. 23-41	574	06/90	Prod	NE/4, NE/4, S23, T9N, R56E	1,701	60		365
Zuspann No. 24-1	198	06/77	SI 1986	NW/4, SW/4, S24, T9N, R56E	0	0		0
Zuspann No. 24-3	208	09/77	Prod	NE/4, NW/4, S24, T9N, R56E	74	0		17
CURRANT (Nye Co., 1979)								
Makoi, Inc.								
Current No. 1	241	10/78	Prod; SI 2005-2007	SE/4, SW/4, S26, T10N, R57E	81	0		6
BACON FLAT (Nye Co., 1981)								
Double D Nevada, LLC								
Bacon Flat No. 1	316	07/81	SI 1988	C, SW/4, S17, T7N, R57E	0	0		0
Bacon Flat Federal No. 23-17	657	09/92	SI 1993	NE/4, SW/4, S17, T7N, R57E	0	0		0
Bacon Flat Federal No. 23-17A	710	01/94	Prod	NE/4, SW/4, S17, T7N, R57E	8,301	2,151		362

STATUS OF NEVADA OIL AND GAS PRODUCTION WELLS IN 2007 (continued)

Field/Operator/Well	Nevada Permit	Date Completed	Status	Location	Production Oil (BBL)	Production Water (BBL)	Production Gas (MCF)	Production Days
BLACKBURN (Eureka Co., 1982)								
Blackburn Oil and Gas								
Blackburn No. 3	324	03/82	SI 1998	SW/4, SW/4, S8, T27N, R52E	0	0		0
Blackburn No. 10	350	09/83	Prod	SW/4, NW/4, S8, T27N, R52E	4,636	9,361		237
Blackburn No. 14	442	07/85	SI 2001	NE/4, SE/4, S7, T27N, R52E	0	0		0
Blackburn No. 16	458	12/85	Prod	SE/4, NE/4, S7, T27N, R52E	1,623	77,090		361
Blackburn No. 18	660	11/92	Prod	NE/4, SE/4, S7, T27N, R52E	13,289	891,241		361
Blackburn No. 19	724	06/94	Prod	NW/4, SW/4, S8, T27N, R52E	18,248	444,332		362
Blackburn No. 21	802	09/97	Prod	NE/4, SE/4, S7, T27N, R52E	1682	160,913		341
GRANT CANYON (Nye Co., 1983)								
Grant Canyon Oil and Gas								
Grant Canyon No. 3	375	08/84	SI 1992	SW/4, SW/4, S16, T7N, R57E	0	0		0
Grant Canyon No. 7	625	08/91	Prod; SI 1993-2007	NW/4, NW/4, S21, T7N, R57E	1,355	17,031		52
Grant Canyon No. 9	642	04/92	Prod	NW/4, NW/4, S21, T7N, R57E	52,053	154,539		349
Grant Canyon No. 22-21	705	01/94	Prod	SE/4, NW/4, S21, T7N, R57E	8,848	271,256		365
KATE SPRING (Nye Co., 1986)								
Makoi, Inc.								
Kate Spring No. 12-2	544	08/89	Prod	NW/4, NW/4, S2, T8N, R57E	8,535	101,609	1,616	365
Western General, Inc.								
Kate Spring No. 1	436	01/86	Prod	W/2, SW/4, S2, T8N, R57E	4,400	43,832	257	N/A
Kate Spring No. 1A	560	12/89	Prod	NW/4, SW/4, S2, T8N, R57E	20,813	160,105	2,158	N/A
Kate Spring No. 1C	592	09/91	SI 1997	SW/4, SW/4, S2, T8N, R57E	0	0	0	0
Taylor Federal No. 1	497	10/87	Prod	NE/4, SE/4, S3, T8N, R57E	4,663	132,437	443	N/A
Taylor Federal No. 2	536	06/89	SI 1993	SE/4, NE/4, S3, T8N, R57E	0	0	0	0
TOMERA RANCH (Eureka Co., 1987)								
Tomera Ranch No. 33-1	591	10/90	PA 1997	SW/4, SW/4, S33, T31N, R52E				
Southern Pacific Land Co. No. 1-5R	647	05/92	PA 2007	NE/4, NE/4, S5, T30N, R52E				
Tomera Ranch No. 33-2RR	841	01/02	PA 2007	SW/4, SW/4, S33, T31N, R52E				
Foreland Corp.								
Southern Pacific Land Co. No. 1-5	492	08/87	WD 1992	NE/4, NE/4, S5, T30N, R52E				
NORTH WILLOW CREEK (Eureka Co., 1988)								
North Willow Creek No. 5-27	646	06/93	PA 1998	SE/4, NW/4, S27, T29N, R52E				
Meritage Energy Co., LLC								
North Willow Creek No. 6-27	648	09/93	SI 1997-2002	NE/4, SW/4, S27, T29N, R52E	1,256	0		333
Southern Pacific Land Co. No. 1-27	503	02/88	SI 2002	NW/4, SE/4, S27, T29N, R52E	0	0		0
THREE BAR (Eureka Co., 1990)								
Three Bar Federal No. 24-13A	566	09/90	PA 2000	SW/4, SW/4, S24, T28N, R51E				
Trail Mountain, Inc.								
Three Bar Federal No. 5	679	07/93	SI 1992	SE/4, NE/4, S25, T28N, R51E	0	0		0
Three Bar Federal No. 25-A	556	10/90	SI 1994	C, NE/4, S25, T28N, R51E	0	0		0
DUCKWATER CREEK (Nye Co., 1990)								
Makoi, Inc.								
Duckwater Creek No. 19-11	542	03/90	Prod	NW/4, NW/4, S19, T9N, R57E	150	1,350		17
SANS SPRING (Nye Co., 1993)								
Double D Nevada, LLC								
Federal No. 5-14	635	02/93	SI 1998	SW/4, NW/4, S14, T7N, R56E	0	0		0
Sans Springs No. 5-14A	792	05/97	Prod	SW/4, NW/4, S14, T7N, R56E	2,971	244,756		261
Federal No. 12-14	673	06/93	SI 1993	SW/4, SW/4, S14, T7N, R56E	0	0		0
GHOST RANCH (Nye Co., 1996)								
Makoi, Inc.								
Ghost Ranch Springs No. 2-21X	800	08/97	Prod	NE/4, NW/4, S2, T8N, R57E	8,408	246,342		365
Meritage Energy Co., LLC								
Ghost Ranch Springs No. 38-35	793	01/97	Prod	SE/4, SW/4, S35, T9N, R57E	9,125	173,514		365
Ghost Ranch Springs No. 47-35	799	03/97	Prod	SE/4, SW/4, S35, T9N, R57E	2,355	124,153		365
Ghost Ranch Springs No. 48-35	779	07/96	Prod	SE/4, SW/4, S35, T9N, R57E	6,182	146,590		365
DEADMAN CREEK (Elko Co., 1996)								
Deadman Creel No. 44-13	342	01/96	PA 1998	SE/4, SE/4, S13, T39N, R65E				
SAND DUNE (Nye Co., 1998)								
Meritage Energy Co., LLC								
Sand Dune Federal No. 88-35	816	07/98	Prod	SE/4, SE/4, S35, T9N, R57E	10,562	31,044		359
TOANO DRAW (Elko Co., 2007)								
D.Y. Exploration								
Toano Draw No. 15-19	856	12/06	Prod	NW/4, SW/4, S19, T39N, R66E	1,916	25,614		116

Three other minor fields recorded no production for 2007. The Three Bar Field's two production wells have produced from the Miocene Humboldt Formation (sandstone and volcanic rock), the Oligocene Indian Well Formation, and the Cretaceous Newark Formation (sandstone and carbonate) between about 5,720 and 7,070 feet. One producer has been shut in since 1994 and the other since 1992. The Tomera Ranch

Field's two production wells, which had produced from the Oligocene Indian Well Formation (chert and tuffaceous sandstone) between about 1,150 and 1,950 feet, were plugged and abandoned in September 2007. One had been shut in since 2004, and the other had been shut in since 2000. Deadman Creek's only production well, which produced briefly from the Miocene Humboldt Formation between 8,165 and 8,850 feet, was plugged and abandoned in 1998.

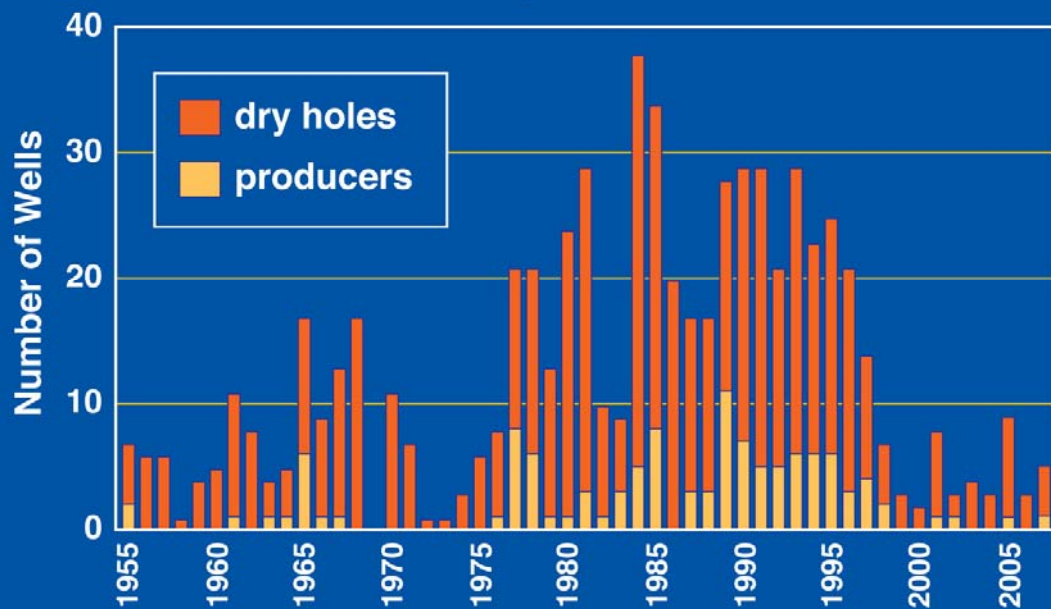
OIL WELL DRILLING ACTIVITY IN NEVADA IN 2007

Company	Well	Permit No.	Location	Permit Date	Spud Date	Completion Date	Depth (Ft.)	Status
ELKO COUNTY								
D.Y. Exploration	Toano Draw 15-19	856	NW/4, SW/4, S19, T39N, R66E	NOV 03	NOV 03	DEC 06	9,779	Producer
V.F. Neuhaus Properties, Inc.	Straight Flush 17-1	896	SW/4, NE/4, S17, T28N, R56E	JUL 07	AUG 07	OCT 07	7,496	P&A
EUREKA COUNTY								
EOG Resources, Inc.	ORG 1-7	889	S7, T23N, R52E	FEB 07	JUL 07	AUG 07	9,447	P&A
Trail Mountain Inc.	Palisades No. 1	897	SE/4, SW/4, S27, T31N, R51E	JUL 07	DEC 07			Drilled
Cleary Petroleum	Bruffey Canyon 1-14	898	SE/4, SW/4, S14, T27N, R52E	AUG 07	OCT 07	DEC 07	7,086	P&A
LINCOLN COUNTY								
Falcon Energy/Kriac Energy, Inc.	Hamlin Wash No. 18-1R	805	SE/4, SE/4, S18, T8N, R70E	Aug-97	Aug-97	Sep-97	3,120	Leases closed
Falcon Energy/Kriac Energy, Inc.	Kriac No. 3	810	SE/4, SE/4, S18, T8N, R70E	Dec-97	Jan-98		2,808	Leases closed
NYE COUNTY								
Double D Nevada, LLC	Federal No. 12-14	673	NW/4, SW/4, S14, T7N, R56E	Apr-93	May-93	Jun-93	6,106	TA
Westar Oil Co.	Gigante No. 1-4	837	NW/4, NE/4, S4, T12N, R35E	May-01	Aug-01	Dec-03	7,707	TA
Tri Valley Oil and Gas	Midland Trail No. 1-32	861	SW/4, SW/4, S32, T6N, R56E	Sep-04	Jun-05	Jan-06	7,063	Testing
Makoil, Inc.	Radio No. 6-31	865	NE/4, NW/4, S6, T9N, R57E	Sep-04	May-05	May-05	3,422	TA
V.F. Neuhaus Properties, Inc.	Currant Creek Ranch 31-1	872	SE/4, SW/4, S31, T10N, R57E	Jul-05	Jul-05		*2,200	TA
Geyser Petroleum	Santa Maria De Los Angeles No. 1	875	NE/4, SW/4, S32, T10N, R57E	Oct-05	Jan-06	Feb-06	9,100	Shut in
Petro World Nevada Corp.	Cobble Questa No. 1-12	876	NW/4, SE/4, S12, T12N, R34E	Dec-05	Sep-06	Apr-07	*5,200	Drilled
Tierra Nevada Exploration Partners, LP	Black Rock No. 1	878	NW/4, SW/4, S29, T8N, R56E	Apr-06			*8,000	Expired
Makoil, Inc.	Munson Ranch 12-43	880	NE/4, SE/4, S12, T9N, R56E	May-06	Sep-06	Oct-06	*5,000	Testing
Makoil, Inc.	Dry Lake 21-21R	881	NE/4, NW/4, S21, T8N, R56E	Jun-06			*2,400	Not Drilled
Eagle Exploration, Inc.	Rio Blanco No. 2	882	NE/4, SW/4, S31, T10N, R62E	Jul-06	Apr-07	May-07	2,600	P&A
Tierra Nevada Exploration Partners, LP	Golden Eye 1	883	NW/4, SW/4, S10, T8N, R57E	Aug-06			*8,500	Not Drilled
Energy Operations Nevada LP	Able Springs 1	884	NE/4, NE/4, S5, T5N, R55E	Jan-07			*7,200	Not Drilled
Energy Operations Nevada LP	Able Springs 2	885	SE/4, SW/4, S8, T5N, R55E	Jan-07			*7,200	Not Drilled
Energy Operations Nevada LP	Able Springs 3	886	SW/4 SE/4, S7, T5N, R55E	Jan-07			*6,500	Not Drilled
Westar Oil, Inc.	Gigante 1-33	891	NW/4, SE/4, S33, T13N, R35E	Feb-07			*5,000	Permit revoked
Eagle Exploration, Inc.	Rio Blanco 3	892	S18, T9N, R62E	Apr-07			*2,500	Not Drilled
Makoil Inc.	East Inselberg 36-33X	893	NW/4, SW/4, S36, T10N, R56E	Jun-07			*1,510	Not Drilled
Meritage Energy Company	Eagle Springs 33-36	894	SE/4, NW/4, S36, T9N, R57E	Jun-07			*9,000	Not Drilled
PERSHING COUNTY								
Evans-Barton, Ltd.	Kyle Spring No. 12-13D	759	NW/4, SW/4, S12, T29N, R36E	Jul-95	Jul-95	Oct-95	1,000	Testing
Evans-Barton, Ltd.	Kyle Spring No. 11-14	791	SW/4, SW/4, S11, T29N, R36E	Oct-96	Nov-96	Nov-96	2,622	Testing
Evans-Barton, Ltd.	Kyle Spring No. 11-43	821	NE/4, SE/4, S11, T29N, R36E	Jul-98	Sep-98	Dec-02	865	Testing
Evans-Barton, Ltd.	Kyle Spring No. 11-43A	838	NE/4, SE/4, S11, T29N, R36E	Jul-01	Aug-01		*625	Testing
Evans-Barton, Ltd.	Kyle Spring No. 12-12	868	SW/4, NW/4, S12, T29N, R36E	Oct-04	Dec-04		*1,200	Testing
WHITE PINE COUNTY								
Richardson Operating Company	Long Valley Federal No. 1	869	SW/4, NW/4, S21, T21N, R58E	Nov-04			*5,000	Expired
Geyser Petroleum	Pipeline Canyon No. 1	870	NE/4, SW/4, S28, T15N, R62E	Jan-05	Mar-05	Sep-05	5,270	Drilled
Energy Operations of Nevada	Yankee Mine West No. 2	871	NE/4, SE/4, S21, T21N, R57E	Jan-05			*4,500	Expired
Plains Exploration & Production Company	Pancake Summit 21-1	887	SW/4, NE/4, S27, T18N, R56E	Jan-07	Mar-07		6,000	P&A
Plains Exploration & Production Company	Pluto 27-1	888	SW/4, NE/4, S27, T18N, R61E	Jan-07	May-07	Jul-07	9,643	P&A
Energy Operations Nevada LP	Yankee Mine West No. 3	890	S21, T21N, R57E	Feb-07			*11,000	Not Drilled
Fasken Oil and Ranch, LP	Noah No. 1	895	SW/4, SE/4, S31, T26N, R55E	Jun-07			*9,000	Not Drilled

P&A: Plugged and abandoned, TA: Temporarily abandoned, *: permitted depth, which is given when actual depth is not available

Most Nevada oil is used to make such products as No. 1 and No. 2 diesel fuel, kerosene, stove oil, and asphalt. Nevada crude oil was transported in batches by trucks to the Energy Income Fund, Inc. (EIF) 8,000- barrel-per-day capacity refinery on U.S. 6 about 12 miles southwest of Currant in Railroad Valley (phone 775-863-0229). The EIF refinery and asphalt storage facility at 105 Refinery Road in Tonopah (phone 775-482-3555) has not been used for oil production since 2002.

Oil Wells Completed in Nevada



N

nbm

NEW PRODUCERS

DY Exploration Toano Draw 15-19 well was completed in December 2006 but did not go into production until July 2007. The pipe was perforated between depths of 8,800 and 8,820 feet and 8,930 and 8,950 feet in fractured sandy siltstone and laminated organic rich shale of the lower Humboldt Formation. The initial production test was for 10 hours and produced 107 barrels of oil and 81 barrels of water. The oil gravity was 32. This well is in Elko County about a mile southeast of Deadman Creek 44-13, which produced several hundred barrels of oil in 1997 and 1998.

NEVADA OIL PRODUCERS

Company	Field	Contact	Addresses, Phone and FAX Numbers, and Websites
Blackburn Oil and Gas	Blackburn	Michael O'Neal Rod Prosceno	1801 Broadway, No. 350 Denver, CO 80202 Phone: 303-297-2777
Double D Nevada, LLC	Bacon Flat Sans Spring	Steve Durrett	2016 Grand Avenue, Suite A Billings, MT 59102 Phone: 406-294-5990 FAX: 406-294-5992
D.Y. Exploration, Inc.	Toano Draw	Dick Knapp	P. O. Box 5405 Boise, ID 83705-0405 Phone: 208-342-8901
Frontier Exploration Company	Trap Spring	Andy Pierce	3006 Highland Drive, No. 206 Salt Lake City, UT 84106 Phone: 801-486-5555 FAX: 801-486-5575
Grant Canyon Oil and Gas	Grant Canyon	Michael O'Neal Rod Prosceno	1801 Broadway, No. 350 Denver, CO 80202 Phone: 303-297-2777
Makoil, Inc.	Currant Duckwater Creek Ghost Ranch Kate Spring Trap Spring	Gregg Kozlowski	25391 Commercentre Drive, No. 120 Lake Forest, CA 92630 Phone: 949-462-9010 FAX: 949-462-9012 Website: http://www.makoil.com
Meritage Energy Company, LLC	Eagle Springs Ghost Ranch North Willow Creek Sand Dune	Thomas J. Corley	1600 Broadway, Suite 1360 Denver, CO 80202 Phone: 720-932-0220 FAX: 720-932-0224 Website: http://www.meritageenergy.com
Western General	Kate Spring	Rick Taylor	801 Noahs Star Street Las Vegas, NV 89145-0609 Phone: 702-233-1490

EXPLORATION

Fifteen wells were permitted for oil and gas in 2007, up from seven permitted in 2006. Six wells were spudded in 2007, the same as in 2006. Drilling was completed on all six, which were plugged and abandoned. These wells totaled 42,272 feet, up 46% from 28,880 feet in 2006. One well spudded in 2006 and one in 2007 were listed as drilled with no further information at the end of 2007. One well permit that was issued in 2004 and later had an extension granted expired in 2007. One well drilled in 2005 was still waiting for a completion rig. Eleven wells drilled between 1993 and 2006 continued to be listed as either temporarily abandoned or testing. One well had its permit revoked when the lease was lost. Hamlin Wash No. 18-1R and Kriac No. 3 were listed as temporarily abandoned and suspended respectively for a decade, but their operators have gone out of business, and the leases have closed.

No rigs operated during the January/February period. Two drill rigs operated during the, March/April, May/June, and July/August periods. One drill rig operated during the September/October and November/December periods.

In 2007, 2,341 oil leases totaling 4,118,404 acres were in effect in Nevada, up 23% and 38% respectively from 2006. This represents about 9% of the public lands managed by the U.S. Bureau of Land Management (BLM) in Nevada and covers an area about the size of the State of Hawaii.

On March 13, 2007, the Nevada State Office of the Bureau of Land Management (NSO-BLM) held an oil and gas lease sale on 27 parcels covering 42,851 acres in Clark, Elko, Esmeralda, Eureka, Lincoln, and Nye Counties. The bonus bids totaled \$32,460.50 on 10 parcels covering 8,696 acres, which averaged \$3.73 per acre. The highest bid was \$17.00 per acre made by Baumgartner Resources, LLC, of Denver, CO, for Parcel 5 covering 320 acres in the south half of Section 34, T9N, R56E in Nye County. The second and third highest bids were \$8.00 per acre for Parcel 5 covering 320 acres in the south half of Section 34, T9N, R56E in Nye County, and \$4.00 per acre for Parcel 12 covering 1,799 acres in portions of Sections 19, 20, 29, 30, 32, and 33, T19N, R57E in Nye County. Both were made by Makoil, Inc. One parcel brought \$3.50 per acre, and the rest went for the \$2.00 per acre minimum (IHS Drilling Wire, Rocky Mountain Region, Four Corners Edition, Section I, January 31, 2007; IHS Drilling Wire, Rocky Mountain Region, Four Corners Edition, Section I, March 21, 2007).

On June 12, 2007, the NSO-BLM held an oil and gas lease sale on 112 parcels covering 202,885 acres in Elko, Eureka, Nye, and White Pine Counties. The bonus bids totaled \$348,705.50 on 55 parcels covering 106,598 acres, which averaged \$3.27 per acre. The highest bid was \$16 per acre made by Robert Wilpitz of Durango, CO, for Parcel 67 covering 181 acres a portion of Section 6, T29N, R56E in Elko County. The second and third highest bids were \$12 per acre for parcel 30, which covers 1,285 acres in portions of Sections 1 and 2, T15N, R53E and \$11 per acre for Parcel 33, which covers 2,560 acres in all of Sections 9, 10, 15, and 16, T15N, R53E, both in Eureka County. Both were made by Liberty Petroleum. Seventeen parcels brought bids between \$3.00 and \$6.00 per acre, and the rest brought the \$2.00 per acre minimum. (IHS Drilling Wire, Rocky Mountain Region, Four Corners Edition, Section I, May 9, 2007; IHS Drilling Wire, Rocky Mountain Region, Southeastern Edition, Section I, June 14, 2007).

On September 11, 2007, the NSO-BLM held an oil and gas lease sale on 132 parcels covering 228,033 acres in Elko, Esmeralda, Eureka, Mineral, Nye, and White Pine Counties. The high bids totaled \$228,997 on 56 parcels covering 108,514 acres, which averaged \$2.11 per acre. The highest bid was \$8 per acre made by Double Eagle Petroleum Co. of Casper WY, for Parcel 6 covering 1,280 acres in all of Sections 8 and 9, T18N, R57E in White Pine County. Double Eagle Petroleum Co. also bid \$7.00 per acre for Parcel 85 covering 1,920 acres in all of Sections 26, 34, and 35, T12N, R57E in Nye County. Only three other parcels brought bids above the \$2.00 per acre minimum, and the rest brought the \$2.00 per acre minimum (IHS Drilling Wire, Rocky Mountain Region, Four Corners Edition, Section I, August 1, 2007; IHS Drilling Wire, Rocky Mountain Region, Southeastern Edition, Section I, September 13, 2007).

On December 11, 2007, the NSO-BLM held an oil and gas lease sale on 189 parcels covering 341,918 acres in Elko, Eureka, Nye, and White Pine Counties. The bonus bids totaled \$272,888 on 45 parcels covering 78,115 acres, which averaged \$3.49 per acre. The highest bid was \$75 per acre made by the Dolar Energy, LLC, of Midvale, UT, for Parcel 74 covering 280 acres in portions Sections 7, 8, and 10, T8N, R57E in Nye County. The second highest bid was \$40 per acre also by Dolar Energy, LLC, for Parcel 75 covering 1,510 acres in portions of Sections 23, 26, 30, and 31, T9N, R57E, in Nye County. The third highest bids were \$9 per acre by Robert Jamison, for Parcel 34. Six parcels brought bids between \$3.50 and \$7 per acre, and the rest brought the \$2.00 per acre minimum (IHS Drilling Wire, Rocky Mountain Region, Southeastern Edition, Section I, December 13, 2007;).

TRANSFERS

In 2007, Blackburn Oil and Gas, LLC, acquired the Blackburn field from Petroleum Corporation, Grant Canyon Oil and Gas, LLC, acquired the Grant Canyon field from Makoil, Inc., and DY Exploration, Inc., of Boise, ID, acquired the Toano Draw No. 15-19 well from the Foreland Corporation/Colour Corporation. Blackburn Oil and Gas, LLC, was formed in Nevada as a foreign limited liability company in 2007 with Rocket Energy, LLC, of Cody, WY, as the manager. Grant Canyon Oil and Gas, LLC was formed in Nevada as a foreign limited liability company in 2006 with Baumgartner Resources, LLC, and O'Neal resources Corporation, both of Denver, CO, Rocket Energy, LLC, of Cody, WY, and Rocky Mountain Resources, LLC, of Dresher, PA, as managing members.

OTHER DEVELOPMENTS

Kinder Morgan Energy Partners LP, is continuing development of an estimated \$400 million expansion of its CALNEV pipeline system between Colton, California, and Las Vegas, Nevada. The system presently consists of an 8-inch pipeline and a 14-inch pipeline which transport gasoline, diesel fuel, and jet fuel. The expansion will consist of building a 16-inch pipeline parallel to the smaller pipelines that will increase the capacity to 200,000 barrels per day. This capacity could eventually be increased to 300,000 barrels per day with the addition of pumping stations. Assuming 24 to 30 months to acquire the environmental permits and rights-of-way and 9 months to build the pipeline, the project is estimated to be ready for start-up in late 2009 or early 2010. Other capital improvements include pump upgrades to increase the present capacity to 156,000 barrels per day and the construction of two 80,000-barrel storage tanks at the Las Vegas terminal for gasoline and diesel fuel (Kinder Morgan Energy Partners press release, July 23, 2007).

Through its newly formed subsidiary, Ruby Pipeline, LLC, the El Paso Corporation of Houston, TX, North America's largest pipeline company and a major natural gas producer, proposed the Ruby Pipeline Project. This will be a 680-mile, 42-inch pipeline to carry natural gas from the Opal Hub, WY, to the Malin, OR, interconnect where it will supply northern Nevada and west coast markets. The initial capacity will be

1.2 billion cubic feet per day, which can be expanded to 2 billion cubic feet per day. In Nevada, the preferred route will be to enter Nevada from Utah approximately near Tecoma (about 50 miles north of Wendover in Elko County), to pass through Elko County north of Wells and Elko and through Humboldt County north of Winnemucca and the Black Rock Wilderness and south of the Sheldon Wildlife National Refuge, and to cross into Oregon near the far northwest corner of Washoe County. El Paso filed a Federal right of way application at the end of 2007, with scoping periods and an environmental impact statement scheduled for 2008. The pipeline is anticipated to connect with the Paiute Pipeline in Humboldt County and is estimated to be ready for use in the first quarter of 2011 (<http://www.rubypipeline.com>).

U.S. OIL PRODUCTION AND CONSUMPTION

According to the Energy Information Agency (EIA) of the U.S. Department of Energy (<http://www.eia.doe.gov>), the total petroleum products supplied to the U.S. averaged 20.70 million barrels per day in 2007, up slightly from 20.69 million barrels per day in 2006 but still 0.5% below the all time high of 20.8 million barrels per day in 2005. Domestic crude oil production averaged 5.105 million barrels per day, up very slightly from 5.102 million barrels per day in 2006 and still 1.4% below 5.178 million barrels per day in 2005. The annual U.S. production for 2006 and 2007 was the lowest since 1949 when production was 5.046 million barrels per day. Imported crude oil averaged 10.017 million barrels per day in 2007, down 1.0% from 10.118 million barrels per day in 2006, and down 1.1% from the all time high of 10.126. Import crude oil still accounted for 66.2% of the total in 2007, down slightly from 66.5% in 2006. The average price of domestic oil increased 11.4% to \$66.52 per barrel in 2007 from an average of \$59.69 per barrel in 2006 (<http://www.eia.doe.gov>).

FEDERAL OIL AND GAS LEASES IN EFFECT IN FISCAL YEARS 2006 AND 2007¹

County	NUMBER OF LEASES						ACREAGE					
	Competitive		Noncompetitive		Simultaneous ²		Competitive		Noncompetitive		Simultaneous ²	
	FY06	FY07	FY06	FY07	FY06	FY07	FY06	FY07	FY06	FY07	FY06	FY07
Carson City	0	0	0	0	0	0	0	0	0	0	0	0
Churchill	2	2	2	2	0	0	5,100	5,100	5,093	5,093	0	0
Clark	0	0	11	6	0	0	0	0	18,982	9,340	0	0
Douglas	0	0	0	0	0	0	0	0	0	0	0	0
Elko	228	278	229	327	0	0	254,085	349,724	528,534	801,174	0	0
Esmeralda	0	11	0	7	0	0	0	16,535	0	10,172	0	0
Eureka	103	239	185	204	1	1	118,980	317,316	486,285	532,892	622	622
Humboldt	0	0	0	0	0	0	0	0	0	0	0	0
Lander	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	28	39	11	19	0	0	27,387	38,525	33,705	59,199	0	0
Lyon	0	0	0	0	0	0	0	0	0	0	0	0
Mineral	0	2	12	14	0	0	0	4,149	25,834	32,968	0	0
Nye	397	379	195	207	19	19	225,329	306,915	384,088	494,295	6,951	7,311
Pershing	0	0	0	0	0	0	0	0	0	0	0	0
Storey	0	0	0	0	0	0	0	0	0	0	0	0
Washoe	0	0	0	0	0	0	0	0	0	0	0	0
White Pine	205	218	275	367	0	0	216,323	295,875	650,569	831,209	0	0
Total	963	1,168	920	1,153	20	20	847,204	1,334,139	2,133,090	2,776,332	7,573	7,933

¹Data from the U.S. Bureau of Land Management. Fiscal years (FY) run from October 1 through September 30.

²These are the remaining leases that were issued under the simultaneous leasing program that was terminated by the December 22, 1987 amendment to the 1920 Mineral Leasing Act.

Directory of Mining and Milling Operations

by David A. Davis

Compiled from information supplied by the Nevada Division of Minerals and the Mine Safety and Training Section of the Division of Industrial Relations.

Sand and gravel operations with less than 100,000 tons annual production are not listed.

CIL = carbon-in-leach, CIP = carbon-in-pulp, HL = heap leach, ML = mill, N/A = not available, OP = open-pit mine, OS = other surface, UG = underground mine.

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
CARSON CITY							
Cinder Pit Red	Cinderlite Trucking Corp.	S22, T16N, R20E	cinder	OP, ML	mining screening	2	1665 South Sutro Terrace Carson City, NV 89706 Phone: 775-882-4483 FAX: 775-882-1671 Web: http://www.cinderlite.com
Goni Pit	Cinderlite Trucking Corp.	S28, T16N, R20E	decomposed granite sand gravel	OP, ML	mining crushing screening	6	1665 South Sutro Terrace Carson City, NV 89706 Phone: 775-882-4483 FAX: 775-882-1671 Web: http://www.cinderlite.com
CHURCHILL COUNTY							
Desert Mountain Aggregate Pit	Various (U.S. Bureau of Land Management manages pit)	S9, 16, 17, T16N, R28E	aggregate	OP, ML	mining crushing screening		5665 Morgan Mill Rd. Carson City, NV 89701 Phone: 775-885-6000 Web: http://www.blm.gov
Hazen Pit	World Minerals, Inc.	S8, 17, T19N, R26E	diatomite	OP	mining	2	100 Front St. Fernley, NV 89408 Phone: 775-575-2536 FAX: 775-575-1570 Web: http://www.worldminerals.com
Huck Salt	Huck Salt Co.	S11, 12, 13, T16N, R31E; S7, T16N, R32E	salt	OS	mining solar evaporation	8	2900 Phritzie Lane Fallon, NV 89406 Phone: 775-423-2055 FAX: 775-423-0467
Lahontan Pit	Jack N. Tedford, Inc.	S5, 7; T18N, R28E	aggregate	OP, ML	mining crushing	2/4	1995 Champion Hills Dr. Reno, NV 89523-3886 Phone: 775-746-3388 FAX: 775-746-3398 Web: http://www.jntinc.com
Moltan Mine and Plant	Moltan Company, LP	S28, 32, T23N, R27E	diatomite	OP, ML	mining crushing drying packaging screening	50	P. O. Box 860 I-80 Frontage Rd. Fernley, NV 89408-0860 Phone: 775-423-6668 FAX: 775-423-6411 Web: http://www.moltan.com
Noble Perlite Plant	Noble Acquisition, LLC	S24, T19N, R27E	perlite	ML	expanding	19	7525 Rockwood Place Fallon, NV 89406 Phone: 775-423-3997 Web: http://www.dicalite.com
Popcorn Mine	EP Minerals, LLC	S24, T16N, R28E; S19, T16N, R29E	perlite	OP	mining	2	640 Clark Station Rd. Sparks, NV 89434 Phone: 775-824-7700 FAX: 775-824-7715 Web: http://www.epminerals.com
CLARK COUNTY							
American Sand and Gravel Pit No. 1 (Salt Lake Highway Pit)	American Sand and Gravel, LLC	S24, T19S, R62E	sand gravel	OP, ML	mining gravity	6	5260 Beesley Dr. Las Vegas, NV 89115 Phone: 702-452-1900 FAX: 702-651-0375
American Sand and Gravel Pit No. 2 (Lone Mountain)	American Sand and Gravel, LLC	S36, T19S, R59E	sand gravel	OP, ML	mining gravity	2	5260 Beesley Dr. Las Vegas, NV 89115 Phone: 702-452-1900 FAX: 702-651-0375
Apex Landfill Pit	Las Vegas Paving Corp.	S19, T18S, R64E	sand gravel	OP, ML	mining crushing screening	22	4420 South Decatur Blvd. Las Vegas, NV 89103 Phone: 702-251-5800 FAX: 702-251-1968 Web: http://www.lasvegaspaving.com
Apex Quarry and Plant	Chemical Lime Co.	S14, 22, 23, 26, 27, 34, 35, T18S, R63E	limestone	OP, ML	mining calcining crushing screening	108	P. O. Box 363068 North Las Vegas, NV 89036 Phone: 702-643-7702 FAX: 702-643-9517 Web: http://www.chemicallime.com
Blue Diamond (Jones) Pit	Las Vegas Paving Corp.	S26, T22S, R60E	sand gravel	OP, ML	mining crushing screening	20	4420 South Decatur Blvd. Las Vegas, NV 89103 Phone: 702-251-5800 FAX: 702-251-1968 Web: http://www.lasvegaspaving.com
Bootleg Pit	Boulder Sand and Gravel, Inc.	S8, T23S, R64E	sand gravel landscape rock	OP, ML	mining crushing screening	9	P. O. Box 62186 Boulder City, NV 89006 Phone: 702-294-1156 FAX: 702-294-0676

DIRECTORY OF MINING AND MILLING OPERATIONS (continued)

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
Boulder Ranch Quarry	Impact Sand and Gravel	S15, 22, T23S, R63E	sand gravel	OP, ML	mining crushing screening	25	250 Pilot Rd., Suite No. 160 Las Vegas, NV 89120 Phone: 702-597-1010 FAX: 702-597-3406 Web: http://www.impactsandandgravel.com
Cactus Pit	Impact Sand and Gravel	S27, T22S, R61E	sand gravel	OP, ML	mining crushing screening	36	250 Pilot Rd., Suite No. 160 Las Vegas, NV 89120 Phone: 702-597-1010 FAX: 702-597-3406 Web: http://www.impactsandandgravel.com
East Pit	Various (U.S. Bureau of Land Management manages pit)	S2, 11, 12, 14, T21S, R62E	sand gravel	OP, ML	mining crushing screening		U.S. Bureau of Land Management 4701 North Torrey Pines Dr. Las Vegas, NV 89130-2301 Phone: 702-515-5000 Web: http://www.blm.gov
El Dorado Quarry	American Asphalt and Gr	S14, T23S, R63E	sand gravel	OP, ML	mining crushing screening	9	2690 North Decatur Blvd. Las Vegas, NV 89108 Phone: 702-649-2669 FAX: 702-649-8693 Web: http://www.aandg.com
El Dorado Quarry	Rinker Materials West, LLC	S11, T23S, R63E	sand gravel	OP, ML	mining crushing screening washing	22	7150 Pollock Dr. Las Vegas, NV 89119 Phone: 702-260-9900 FAX: 702-260-9902 Web: http://www.rinkermaterials.com
Henderson Plant	Chemical Lime Co.	S12, T22S, R62E	lime	ML	calcining	29	P. O. Box 127 BMI Complex Henderson, NV 89015 Phone: 702-565-8991 FAX: 702-565-5902 Web: http://www.chemicallime.com
Infiniton Sand Pit	Rinker Materials West, LLC	S19, T13S, R66E	sand	OP	mining	16	7150 Pollock Dr. Las Vegas, NV 89119 Phone: 702-260-9900 FAX: 702-260-9902 Web: http://www.rinkermaterials.com
Jean Pit	Service Rock Products	S28, T24S, R60E	sand gravel	OP, ML	mining crushing screening	9	2670 Chandler Ave. Las Vegas, NV 89120 Phone: 702-798-0569 Web: http://www.servicerock.com
Jetco Enterprises	Jetco Enterprises, Inc.	S33, T30S, R65E	decorative rock	OP	mining	3	2076 Mohigan Way, Suite 108 Las Vegas, NV 89169-3327 Phone: 702-732-9947 FAX: 702-369-9294 Web: http://www.jetcoenterprises.com
KMI Zeolite Plant	KMI Zeolite, Inc.	S3, T25S, R57E	zeolite	ML	processing	4	HCR 37 Box 52 Sandy Valley, NV 89019 Phone: 702-723-5415 Web: http://www.kmizeolite.com
Lone Mountain	Diamond Construction	S36, T19S, R59E	sand gravel	OP, ML	mining gravity	25 (combined)	7885 Westwind Rd. Las Vegas, NV 89139 Phone: 702-644-1016 FAX: 702-644-6541
Lone Mountain	Hollywood Gravel, Inc.	S35, T19S, R59E	sand gravel	OP, ML	mining crushing screening	9	5145 South Rogers St., Suite A-1 Las Vegas, NV 89118 Phone: 702-870-7094 FAX: 702-870-8114 Web: http://www.hwdgravel.com
Lone Mountain	Impact Sand and Gravel	S24, 36, T19S, R59E	sand gravel	OP, ML	mining crushing screening	30	250 Pilot Rd., Suite No. 160 Las Vegas, NV 89120 Phone: 702-597-1010 FAX: 702-597-3406 Web: http://www.impactsandandgravel.com
Lone Mountain	Las Vegas Paving Corp.	S3, T20S, R60E	sand gravel	OP, ML	mining crushing screening	15	4420 South Decatur Blvd. Las Vegas, NV 89103 Phone: 702-251-5800 FAX: 702-251-1968 Web: http://www.lasvegaspaving.com
Lone Mountain	Nevada Ready Mix Corp.	S36, T19S, R59E	sand gravel	OP, ML	mining crushing screening	77	601 West Bonanza Las Vegas, NV 89106 Phone: 702-457-1115 Web: http://www.nevadareadymix.com
Lone Mountain	Quality Sand and Gravel	S1, T20S, R59E	sand gravel	OP, ML	mining crushing screening	6	281 Commerce Park Ct. North Las Vegas, NV 89032 Phone: 702-646-3846 FAX: 702-646-3484
Lone Mountain Community Pit	Various (U.S. Bureau of Land Management manages pit)	S36, T19S, R59E; S1, T20S, R59E	sand gravel	OP, ML	mining crushing screening		U.S. Bureau of Land Management 4701 North Torrey Pines Dr. Las Vegas, NV 89130-2301 Phone: 702-515-5000 Web: http://www.blm.gov
Lone Mountain Stocks Pit	Southern Nevada Paving	S34, 35, T19S, R59E; S3, 4, 11, T20S, R59E	sand gravel	OP, ML	mining crushing screening	9	3555 Polaris Ave. Las Vegas, NV 89102 Phone: 702-876-5226

DIRECTORY OF MINING AND MILLING OPERATIONS (continued)

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
Mesquite Community Pit	Precision Aggregate Pro duct, LLC	S20, T13S, R71E	sand gravel	OP, ML	mining crushing screening	N/A	720 Creston Way, Suite B Mesquite, NV 89027 Phone: 702-346-1343
Mesquite Community Pit	Rees's Enterprise	S20, T13S, R71E	sand gravel	OP, ML	mining crushing screening	6	1045 South Hoytsville Road Coalville, UT 84017-9741 Phone: 801-359-9781
Moapa Pit	Ready Mix, Inc.	S2; T15S, R66E	aggregate	OP, ML	mining milling	14	3430 East Flamingo Road, Suite 100 Las Vegas, NV 89021 Phone: 702-433-2090 FAX: 702-433-0189 Web: http://www.readymixinc.com
Money Pit	Southern Nevada Liteweight, Inc.	S16, T25S, R61E	sand gravel	OP, ML	mining milling	13	1101 E. Alexander Rd. Las Vegas, NV 89030 Phone: 702-399-1177 FAX: 702-633-5830 Web: http://www.snlisand.com
North Jean Lake Pit	Various (U.S. Bureau of Land Management manages pit)	S22, T24S, R60E	sand gravel	OP, ML	mining crushing screening		U.S. Bureau of Land Management 4701 North Torrey Pines Dr. Las Vegas, NV 89130-2301 Phone: 702-515-5000 Web: http://www.blm.gov
PABCO Gypsum-Apex Pit	Pacific Coast Building Products, Inc.	S7, 18, T20S, R64E	gypsum	OP, ML	mining crushing washing	143/3	P. O. Box 364329 North Las Vegas, NV 89036 Phone: 702-407-3700 FAX: 702-643-6249 Web: http://www.paccoast.com
Pioneer Gypsum Mine	D. L. Denman Construction Co.	S30, T19S, R64E	gypsum	OP, ML	mining crushing screening	7	4880 Donovan Way North Las Vegas, NV 89031 Phone: 702-399-5939 FAX: 702-399-8353
Pipes Pit	Pipes Paving	S1, T20S, R59E	sand gravel	OP, ML	mining crushing screening	7	3529 Clayton St. North Las Vegas, NV 89032 Phone: 702-647-1162 FAX: 702-647-2387
Pittman Detention Pit	Aggregate Industries	S9, 10, T23S, R61E	sand gravel	OP, ML	mining crushing screening	5	3920 West Hacienda Ave. Las Vegas, NV 89118 Phone: 702-876-5226 FAX: 702-876-0694 Web: http://www.aggregate-us.com
Providence Pit	Impact Sand and Gravel	S13, T19S, R59E	sand gravel	OP, ML	mining crushing screening	N/A	250 Pilot Rd., Suite No. 160 Las Vegas, NV 89120 Phone: 702-597-1010 FAX: 702-597-3406 Web: http://www.impactsandandgravel.com
Racetrack Pit	Las Vegas Paving Corp.	S24, T19S, R62E	sand gravel	OP, ML	mining crushing screening	4	4420 South Decatur Blvd. Las Vegas, NV 89103 Phone: 702-251-5900 FAX: 702-251-1968 Web: http://www.lasvegaspaving.com
Rainbow Quarries	Las Vegas Rock, Inc.	S34, T25S, R58E	gravel stone	OP, ML	mining crushing sawing	17	11635 Bermuda Rd. Henderson, NV 89052 Phone: 702-791-7625 FAX: 702-361-6360 Web: http://www.vegasrock.com
Salt Lake Highway Pit	Various (U.S. Bureau of Land Management manages pit)	S13, 24, T19S, R62E; S17, 18, 19, T19S, R63E	sand gravel	OP	mining		U.S. Bureau of Land Management 4701 North Torrey Pines Dr. Las Vegas, NV 89130-2301 Phone: 702-515-5000 Web: http://www.blm.gov
Sierra Ready Mix Quarry	Sierra Ready Mix, LLC	S4, T25S, R59E	sand gravel	OP, ML	mining crushing screening	4	4150 Smilly Rd. North Las Vegas, NV 89081 Phone: 702-664-3000 FAX: 702-664-1736 Web: http://www.sierrareadymix.com
Simplot Silica Products Pit	Simplot Silica Products	S11, T17S, R67E	silica sand	OP, ML	mining drying flotation screening	48	P. O. Box 308 Overton, NV 89040 Phone: 702-397-2667 FAX: 702-397-2798 Web: http://www.simplot.com
Sloan Quarry and Mill	Aggregate Industries	S13, T23S, R60E	sand gravel	OP, OS, ML	mining crushing screening	88	3920 West Hacienda Ave. Las Vegas, NV 89118 Phone: 702-876-5226 FAX: 702-876-0694 Web: http://www.aggregate-us.com
Spanish Trails Pit	Hollywood Gravel, LP	S28, T21S, R60E	sand gravel	OP, ML	mining crushing screening	3	908 South Valley View Blvd. Las Vegas, NV 89107 Phone: 702-870-7094 FAX: 702-870-8114
Speedway Pit	Diamond Construction	S19, T19S, R63E	sand gravel	OP, ML	mining gravity	see Lone Mountain	7885 Westwind Rd. Las Vegas, NV 89139 Phone: 702-644-1016 FAX: 702-644-6541

DIRECTORY OF MINING AND MILLING OPERATIONS (continued)

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
Spring Mountain Pit and Mill	Wells Cargo, Inc.	S10, 15; T21S, R60E	sand gravel	OS, ML	mining gravity	13	P. O. Box 81170 7770 West Spring Mountain Rd. Las Vegas, NV 89160 Phone: 702-873-7440 FAX: 702-873-1696 Web: http://www.wellscargoconstruction.com
Summerlin pit	Aggregate Industries	S22, T20S, R59E	sand gravel	OP, OS, ML	mining crushing screening	5	3920 West Hacienda Ave. Las Vegas, NV 89118 Phone: 702-876-5226 FAX: 702-876-0694 Web: http://www.aggregate-us.com
DOUGLAS COUNTY							
Bing Materials Pit and Plant	Bing Materials Co.	S16, T12N, R20E	sand gravel	OP, ML	mining crushing screening	9	P. O. Box 487 Minden, NV 89423 Phone: 775-265-3641
Dressler Pit	A and A Construction, Inc.	S32, 33, T12N, R20E	sand	OS, ML	mining screening	1	P. O. Box 995 Minden, NV 89423 Phone: 775-782-5957 FAX: 775-782-0322
ELKO COUNTY							
Elburz Pit	Vega Construction and Trucking Co.	S9, T33N, R52E	sand gravel	OP, ML	mining crushing screening	26	P. O. Box 1630 Elko, NV 89803 Phone: 775-738-5381 FAX: 775-738-6311
Hollister Mine	Rodeo Creek Gold, Inc., and Great Basin Gold, Inc.	¶, R48E; S32, T	gold silver	UG	mining	119/25	P. O. Box 2610 Winnemucca, NV 89446 Phone: 775-623-5760 FAX: 775-623-5759 Web: http://www.greatbasingold.com
Jerritt Canyon Mine	Yukon-Nevada Gold Corp.	T39-41N, R52-54E	gold silver mercury	UG, ML, CIL	mining heap leach milling roasting	357	HC31 Box 78 Elko, NV 89801 Phone: 775-738-5006 FAX: 775-758-9231 Web: http://www.yukon-nevadagold.com
Meikle Mine	Barrick Gold Corp.	S12, 13, T36N, R50E	gold silver	UG, ML	mining milling roasting	703/216	P. O. Box 29 Elko, NV 89803 Phone: 775-738-8043 FAX: 775-738-6543 Web: http://www.barrick.com
Midas Mine	Newmont Mining Corp.	S21, 22, 27, 28, 33, 34; T39N, R46E	gold silver	UG, ML	mining milling	220	HC66 Box 125 Midas, NV 89414 Phone: 775-635-6423 FAX: 775-635-6460 Web: http://www.newmont.com
Pilot Peak Quarry and Plant	Graymont Western US., Inc.	S14, 15, 22, 23, 26, T34N, R68E	limestone	OP, ML	mining calcination rotary kiln	57	P. O. Box 2520 West Wendover, NV 89883 Phone: 775-483-5463 FAX: 775-483-5149 Web: http://www.graymont.com
Rossi Mine	BAROID/Halliburton Energy Services, Inc.	S14-16, 21-23, 26-28, 34-35, T37N, R49E	barite	OP, ML	mining	0/26	912 Dunphy Ranch Rd. Battle Mountain, NV 89820 Phone: 775-468-0515 FAX: 775-468-2060 Web: http://www.halliburton.com
ESMERALDA COUNTY							
Basalt Mine and Plant	Grefco Minerals, Inc.	S23-26, T2N, R33E; S28, 29, 32, T2N, R34E	diatomite	OP, ML	drying milling	9	36994 Summit Lake Rd. Burney, CA 96013 Phone: 775-573-2422 FAX: 775-573-2422 Web: http://www.dicalite.com
Blanco Mine	Vanderbilt Minerals Corp.	S22, T1N, R37E	clay	OP	bagging grinding screening	4	3561 East East Burgundy Dr. P. O. Box 6660 Pahrump, NV 89048 Phone: 775-537-6976 FAX: 775-537-6879 Web: http://www.rtvanderbilt.com
Lone Mountain Turquoise Mine	Lone Star Mining, LLC	S18, T1N, R41E	turquoise	OP	mining	2	P. O. Box 1601 Tonopah, NV 89049-1601 Phone: 775-482-5903
Rulco Potassium Sulfate Project	Rulco, LLC	S32, 33, T1N, R38.5E	potassium sulfate	OP, ML	crushing milling shipping	2/2	1019 CR330 Ignacio, CO 81137 Phone: 970-883-2468 FAX: 970-883-2469
Silver Peak Operations	Chemetall Foote Corp.	T2S, R39-40E	lithium carbonate	OS, ML	mining solar evaporation precipitation	55/13	P. O. Box 98 Silver Peak, NV 89047 Phone: 775-937-2222 FAX: 775-937-2250 Web: http://www.chemetall.com

DIRECTORY OF MINING AND MILLING OPERATIONS (continued)

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
EUREKA COUNTY							
Betze/Post Mine	Barrick Gold Corp.	S23-26, T36N, R49E; S12, 20, 29, 30; T36N, R50E	gold	OP, CIL, HL, ML	mining heap leach milling roasting	1131	P. O. Box 29 Elko, NV 89803 Phone: 775-748-1001 FAX: 775-748-1240 Web: http://www.barrick.com
Carlin North - Genesis Complex	Newmont Mining Corp.	S33, T36N, R50E	gold	OP, HL, ML	mining bioleaching heap leach milling roasting	2127 (combined)	P. O. Box 669 Carlin, NV 89822-0669 Phone: 775-778-4000 FAX: 775-778-4751 Web: http://www.newmont.com
Carlin North - Post and adjacent mines	Newmont Mining Corp.	S19, T36N, R50E	gold	OP, HL, ML	mining bioleaching heap leach milling roasting	see Genesis	P. O. Box 669 Carlin, NV 89822-0669 Phone: 775-778-4000 FAX: 775-778-4751 Web: http://www.newmont.com
Carlin South - Carlin and adjacent mines	Newmont Mining Corp.	S14, T35N, R50E	gold	UG, HL, ML	mining bioleaching heap leach milling roasting	see Genesis	P. O. Box 669 Carlin, NV 89822-0669 Phone: 775-778-4000 FAX: 775-778-4751 Web: http://www.newmont.com
Carlin South - Gold Quarry and adjacent mines	Newmont Mining Corp.	S3, T33N, R51E	gold	OP, HL, ML	mining bioleaching heap leach milling roasting	see Genesis	P. O. Box 669 Carlin, NV 89822-0669 Phone: 775-778-4000 FAX: 775-778-4751 Web: http://www.newmont.com
Dunphy Mill	BAROID/Halliburton Energy Services, Inc.	S26, T33N, R48E	barite	ML	crushing gravity grinding	41/4	912 Dunphy Ranch Rd. Battle Mountain, NV 89820 Phone: 775-468-0515 FAX: 775-468-2060 Web: http://www.halliburton.com
Nevada Barth Iron Mine and Mill	Saga Exploration Co.	S7, T31N, R51E	iron	OP, ML	screening	3	2339 Dickerson Road Reno, NV 89503 Phone: 775-322-9994
Ruby Hill Mine	Barrick Gold Corp.	S9-11, 14, 15, T19N, R53E	gold silver	OP, CIL, CIL, HL, ML	heap leach milling	118/47	P. O. Box 676 Eureka, NV 89316 Phone: 775-237-6060 FAX: 775-237-5408 Web: http://www.barrick.com
HUMBOLDT COUNTY							
Ashdown Mine	Ashdown Project, LLC	S14, T45N, R29E	molybdenum gold	UG, ML	mining flotation milling	68/2	1675 East Prater Way, Suite No. 102 Sparks, NV 89434 Phone: 775-853-4919 FAX: 775-853-5010 Web: http://www.golden-phoenix.com
Lone Tree Mine (Lone Tree Complex)	Newmont Mining Corp.	S1, 11, 13, 15, 23, T34N, R42E	gold silver	OP, HL, ML	mining flotation heap leach milling	117 (combined)	P. O. Box 388 Valmy, NV 89438-0388 Phone: 775-635-6423 FAX: 775-635-6460 Web: http://www.newmont.com
Marigold Mine	Goldcorp, Inc.	S8, 9, 18-20; T33N, R43E	gold silver	OP, HL, ML	mining heap leach milling	213/35	P. O. Box 160 Valmy, NV 89438 Phone: 775-635-2317 FAX: 775-635-2551 Web: http://www.goldcorp.com
MIN-AD Mine	MIN-AD, Inc.	S28, T35N, R38E	dolomite	OP, ML	mining grinding	22/4	P. O. Box 39 Winnemucca, NV 89446 Phone: 775-623-5944 FAX: 775-623-9028 Web: http://www.min-ad.com
Rainbow Ridge Opal Mine	Rainbow Ridge Opal Mines, Inc.	S22, 23, T45N, R26E	opalized wood precious opal	OP	mining	1	P. O. Box 97 Denio, NV 89404 Phone: (Summer) 775-941-0270 Phone: (Winter) 541-548-4810 Web: http://www.nevadaopal.com
Royal Peacock Opal Mine	Walter Wilson	S30, T45N, R26E	precious opal	OP	mining	1	P. O. Box 165 Denio, NV 89404 Phone: (Summer) 775-941-0374 Phone: (Winter) 775-272-3201 Web: http://www.royalpeacock.com
Turquoise Ridge Joint Venture	Barrick Gold Corp.	S33, T39N, R42E	gold silver	UG	mining	311/92	HC 66 Box 220 Golconda, NV 89414-9702 Phone: 775-529-5001 FAX: 775-529-0753 Web: http://www.placerdome.com
Twin Creeks Mine	Newmont Mining Corp.	S3-10, 15-22, 27-32, T39N, R43E	gold silver	OP, HL, ML	mining heap leach milling	543	P. O. Box 69 Golconda, NV 89414 Phone: 775-623-4300 FAX: 775-635-4602 Web: http://www.newmont.com

DIRECTORY OF MINING AND MILLING OPERATIONS (continued)

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
LANDER COUNTY							
Argenta Mill	Baker Hughes Drilling Fluids	S6, T32N, R47E	barite	ML	gravity grinding	18/3	P. O. Box 277 Battle Mountain, NV 89820 Phone: 775-635-5441 FAX: 775-635-5455 Web: http://www.bakerhughes.com
Argenta Mine	Baker Hughes Drilling Fluids	S13, 14, T32N, R46E; S18, 19, T32N, R47E	barite	OP	mining	11/1	P. O. Box 277 Battle Mountain, NV 89820 Phone: 775-635-5441 FAX: 775-635-5455 Web: http://www.bakerhughes.com
Battle Mountain Grinding Plant	M-I Swaco	S18, T32N, R45E	barite	ML	gravity grinding	39	P. O. Box 370 2 North Second Street Battle Mountain, NV 89820 Phone: 775-635-5135 FAX: 775-635-2191 Web: http://www.miswaco.com
Blue Ridge Mine	Jay and Grace Wintle	S19, 20, 29, 30, T28N, R47E	turquoise	OP	mining screening sorting	3	810 Sheep Creek Road Battle Mountain, NV 89820 Phone: 775-635-5231
Cortez Gold Mines	Cortez Joint Venture	S31, 33, 34, T28N, R47E	gold	OP, HL, ML	mining heap leach milling	550	HC 66 Box 1250 Crescent Valley, NV 89821 Phone: 775-468-4400 FAX: 775-468-4496 Web: http://www.barrick.com
Greystone Mine	M-I Swaco	S35, T28N, R45E	barite	OP, ML	mining gravity	48	P. O. Box 370 Battle Mountain, NV 89820 Phone: 775-635-5135 FAX: 775-635-2191 Web: http://www.miswaco.com
Mule Canyon Mine (Lone Tree Complex)	Newmont Mining Corp.	S4, T31N, R47E	gold silver	OP	mining	see Lone Tree	P. O. Box 388 Valmy, NV 89438-0388 Phone: 775-635-6423 FAX: 775-635-6460 Web: http://www.newmont.com
Phoenix Project	Newmont Mining Corp.	S22, 27, 33, 34, T31N, R43E	gold silver	OP, HL, ML	mining heap leach	500	P. O. Box 388 Valmy, NV 89438-0388 Phone: 775-635-6423 FAX: 775-635-6460 Web: http://www.newmont.com
Trenton Canyon Mine	Newmont Mining Corp.	S7, 18, 19, T32N, R43E	gold silver	OP, HL, ML	heap leach	see Lone Tree	P. O. Box 388 Valmy, NV 89438-0388 Phone: 775-635-6423 FAX: 775-635-6460 Web: http://www.newmont.com
LINCOLN COUNTY							
Natural Pozzolan of Nevada	Natural Pozzolan of Nevada, LLC	S25, 36, T1S, R67E	pozzolan	OP, ML	crushing screening	3	P. O. Box 308 450 East Main Panaca, NV 89042 Phone: 877-676-7699
Tenacity Perlite Mine and Mill	Wilkin Mining and Trucking Co., Inc.	S34, T4S, R62E	perlite	OP, ML	mining milling	7	HC 34 Box 199 Caliente, NV 89008 Phone: 775-728-4463 FAX: 775-728-4456
LYON COUNTY							
Adams Claim Gypsum Mine	Art Wilson Co.	S25, T16N, R20E	gypsum limestone	OP, ML	mining crushing screening pelletizing	52/1	P. O. Box 20160 Carson City, NV 89702-1160 Phone: 775-882-0700 FAX: 775-882-0790 Web: http://www.awgypsum.com
Celite Mine	World Minerals, Inc.	S11, T20N, R24E	diatomite	ML	classification drying grinding milling	14	100 Front St. Fernley, NV 89408 Phone: 775-575-2536 FAX: 775-575-1570 Web: http://www.worldminerals.com
Hazen Pit	EP Minerals, LLC	S6, 9, T19N, R26E	diatomite	OP	mining	2	640 Clark Station Rd. Sparks, NV 89434 Phone: 775-824-7700 FAX: 775-824-7715 Web: http://www.epminerals.com
Nevada Cement Mine	Nevada Cement Co.	S3-6, 9, T19N, R25E; S31-33, T20N, R25E	limestone	OP	mining	14	P. O. Box 840 Fernley, NV 89408 Phone: 775-575-2281 FAX: 775-575-4387 Web: http://www.eaglematerials.com
Nevada Cement Plant	Nevada Cement Co.	S10, 11, T20N, R24E	limestone clay	ML	crushing dry milling rotary kiln	112	P. O. Box 840 Fernley, NV 89408 Phone: 775-575-2281 FAX: 775-575-4387 Web: http://www.eaglematerials.com

DIRECTORY OF MINING AND MILLING OPERATIONS (continued)

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
Yerington Plant	Grant Smith Associates, Inc.	S4, T12N, R25E	sand gravel	OS, ML	mining crushing screening	17	435 Highway 339 P. O. Box 815 Yerington, NV 89447 Phone: 775-463-3111 FAX: 775-463-4642
MINERAL COUNTY							
Denton-Rawhide Mine	Kennecott Rawhide Mining Co.	S4, 5, 8, 16, 17, T13N, R32E	gold silver	OP, HL	heap leach	17/5	P. O. Box 2070 Fallon, NV 89407 Phone: 775-945-1015 FAX: 775-945-1213 Web: http://www.kennecottminerals.com
NYE COUNTY							
Ash Meadows Plant	Zeox Mineral Materials Corp.	S25, T18S, R50E	unaltered ash zeolite	ML	crushing screening packaging	3	HCR 70 Box 7006 East Spring Meadows Rd. Amargosa Valley, NV 89020 Phone: 775-372-5524 FAX: 775-764-0990 Web: http://www.zeoxcorporation.com
Bolling (Simkins) Pit	Bolling Construction, Inc.	S26, T19S, R53E	sand gravel	OP, ML	mining milling	3	2200 East Calvada Blvd., Suite A Pahrump, NV 89048 Phone: 775-727-7070 FAX: 775-727-6432
Cinder Cone Pit	Allied Building Materials, Inc./Cind-R-Lite Company	S36, T14S, R48E; S31, T14S, R49E; S1, T15S, R48E; S6, T15S, R49E	cinder	OP, ML	mining screening	14	4745 Mitchell St. North Las Vegas, NV 89081 Phone: 702-651-1550 FAX: 702-651-1551 Web: http://www.abmnv.com
Gabbs Mine	Premier Chemicals, LLC	S22, 23, 25-27, 34-36, T12N, R36E	magnesite	OP, ML	mining calcining sizing	90	P. O. Box 177 Gabbs, NV 89409 Phone: 775-285-2601 FAX: 775-285-4030 Web: http://www.premierchemicals.com
IMV Pits	Mud Camp Mining Co., LLC	S28, 29, T17S, R49E	clay	OP, ML	mining classification crushing grinding screening	30	HCR 70 Box 549 Amargosa Valley, NV 89020 Phone: 775-372-5341 FAX: 775-372-5640 Web: http://www.imvnevada.com
Mercury Mine	American Silica, Inc.	S29, T15S, R54E	silica sand	OP	mining	15	26801 Vista Terrace, Suite 200 Lake Forest, CA 92630 Phone: 949-297-9333 FAX: 949-588-1917 Web: http://www.fitchindustries.com
New Discovery Mine/White Caps Mill	Vanderbilt Minerals Corp.	S13, 14, T12S, R46E; S18, 19, T12S, R47E	clay	OP, UG, ML	bagging grinding screening	9	3561 East Burgundy Dr. P. O. Box 6660 Pahrump, NV 89048 Phone: 775-537-6976 FAX: 775-537-6879 Web: http://www.rtvanderbilt.com
Pahrump Community Pit	Various (U.S. Bureau of Land Management manages pit)	S28, 29, T20S, R54E	sand gravel	OP	mining		U.S. Bureau of Land Management 4701 North Torrey Pines Dr. Las Vegas, NV 89130-2301 Phone: 702-515-5000 Web: http://www.blm.gov
Round Mountain Mine (Smoky Valley Common Operation)	Round Mountain Gold Corp.	S19, 20, 29, 30, T10N, R44E	gold silver	OP, HL, ML	mining gravity heap leach milling	674/32	P. O. Box 480 Smoky Valley Mine Rd. Round Mountain, NV 89405 Phone: 775-377-2366 FAX: 775-377-3224 Web: http://www.kinross.com
Royal Royston	Dean Otteson and Danny Otteson	S31, T6N, R40E	turquoise	OP	mining	2	P. O. Box 564 Tonopah, NV 89049 Phone: 970-375-2401 Web: http://www.roystonturquoise.com
Spicerite and Landscape Project	D and H Mining	S16, T11S, R47E	landscape rock "Spicerite"	OP, ML	mining crushing screening	6/3	P. O. Box 987 Beatty, NV 89003 Phone: 775-553-2459 FAX: 775-553-2388
Wheeler Pit	Bolling Construction, Inc.	S28, T20S, R54E	sand gravel	OP, ML	mining milling	2	2200 East Calvada Blvd., Suite A Pahrump, NV 89048 Phone: 775-727-7070 FAX: 775-727-6432
PERSHING COUNTY							
Buff-Satin Mine	Vanderbilt Minerals Corp.	S2, T27N, R32E	clay	OP	bagging grinding screening	4	3561 East Burgundy Dr. P. O. Box 6660 Pahrump, NV 89048 Phone: 775-537-6976 FAX: 775-537-6879 Web: http://www.rtvanderbilt.com

DIRECTORY OF MINING AND MILLING OPERATIONS (continued)

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
Coeur Rochester Mine	Coeur Rochester, Inc.	S9-11, 15, 16, 21, 27, 28, T28N, R34E	silver gold	OP, HL, ML	mining heap leach milling	38	P. O. 1057 Lovelock, NV 89419 Phone: 775-273-7995 FAX: 775-273-7423 Web: http://www.coeur.com
Colado Mines	EP Minerals, LLC	S6, 7, 16, 18, 21, 25, T28N, R29E	diatomite perlite	OP, OS	mining	30	P. O. Box 959 150 Coal Canyon Road Lovelock, NV 89419 Phone: 775-824-7540 FAX: 775-824-7582 Web: http://www.epminerals.com
Colado Plant	EP Minerals, LLC	S33, T28N, R32E	diatomite perlite	ML	drying classification grinding calcining	87	P. O. Box 959 150 Coal Canyon Road Lovelock, NV 89419 Phone: 775-824-7540 FAX: 775-824-7582 Web: http://www.epminerals.com
Empire Quarry	United States Gypsum Co.	S31, T31N, R24E	gypsum	OP	mining	10	P. O. Box 130 Empire, NV 89405 Phone: 775-557-2341 FAX: 775-557-2212 Web: http://www.usg.com
Florida Canyon Mine	Florida Canyon Mining, Inc.	S1-4, 9-15, T31N, R33E; S37-39, T31.5N, R33E; S33-35, T32N, R33E	gold silver	OP, HL, ML	mining heap leach milling	120/5 (combined)	P. O. Box 330 Imlay, NV 89418 Phone: 775-538-7300 FAX: 775-538-7324 Web: http://www.jpangu.co.jp
Nassau (Section 8) Mine	American Colloid Co.	S8, T27N, R33E	clay	OP	mining shipping	0	P. O. Box 2010 Belle Fourche, SD 57717 Phone: 605-892-6371 FAX: 605-892-3178 Web: http://www.colloid.com
Standard Mine	Standard Gold Mining, Inc.	S1, 12, T30N, R33E; S35, T31N, R33E	gold silver	OP, HL, ML	mining heap leach milling	see Florida Canyon	P. O. Box 330 Imlay, NV 89418 Phone: 775-538-7300 FAX: 775-538-7324 Web: http://www.jpangu.co.jp
W. Glen Sexton Family Trust	Nutritional Additives Corp.	S5, T34N, R38E	dolomite	OP, ML	mining milling	3	415 Wellington Street Winnemucca, NV 89445 Phone: 775-623-1151 FAX: 775-623-1153
STOREY COUNTY							
All-Lite Pit and Plant	CEMEX	S26, 33, 34, T19N, R22E	sand gravel	OS, ML	mining crushing screening	31	P. O. Box 51990 3005 Canyon Way Sparks, NV 89434 Phone: 775-342-0500
Basalite Dayton Pit	Basalite Concrete Products	S8, 9, 16, 17, T17N, R22E	sand gravel	OS, ML	mining crushing milling	7	2600 Boeing Way Carson City, NV 89701 Phone: 775-882-9336 FAX: 775-887-1025 Web: http://basalite.pacocast.com
Clark Mill	EP Minerals, LLC	S35, T20N, R22E	diatomite	ML	calcining classification drying grinding	54	640 Clark Station Rd. Sparks, NV 89434 Phone: 775-824-7700 FAX: 775-824-7715 Web: http://www.epminerals.com
Clark Mine	EP Minerals, LLC	S27, 33, 34, T20N, R23E	diatomite	OP		12	640 Clark Station Rd. Sparks, NV 89434 Phone: 775-824-7700 FAX: 775-824-7715 Web: http://www.epminerals.com
Hartford Hill Complex	The Plum Mining Co., LLC	S6, T16N, R21E	gold silver	OP, HL, ML	mining heap leach milling	20/12	P. O. Box 1118 Virginia City, NV 89440 Phone: 775-847-5272 FAX: 775-847-4762 Web: http://www.goldspring.us
Trico Pit	Gopher Construction Co.	S33, T20N, R22E	aggregate	OP	mining crushing	6	1625 East Newlands Dr. P. O. Box 801 Fernley, NV 89408 Phone: 775-575-4333 FAX: 775-575-1137
WASHOE COUNTY							
Bella Vista Pit	A and K Earthmovers	S3, 4, T18N, R20E; 33, 34, T19N, R20E	sand rock	OP, ML	mining crushing screening	13/3	P. O. Box 1059 1200 Auction Rd. Fallon, NV 89407 Phone: 775-423-6085 FAX: 775-423-8410 Web: http://www.akearthmovers.com

DIRECTORY OF MINING AND MILLING OPERATIONS (continued)

Mine/plant name	Operator	Location	Commodity	Type	Process/ activity	Company/Contract Employees	Address
CEMEX Paiute Pit	CEMEX	S2, 27, 34, T21N, R24E	sand gravel	OP	mining	13	10 Hill Ranch Road Wadsworth, NV 89442 Phone: 775-575-1162
Clay Mine	Nevada Cement Co.	S13, 14, T27N, R19E	clay	OP, ML	mining milling	2	P. O. Box 840 Fernley, NV 89408 Phone: 775-575-2281 FAX: 775-575-4387 Web: http://www.eaglematerials.com
Empire Mill	United States Gypsum Co.	S11, 13, T31N, R23E	gypsum	ML	calcining crushing	114	P. O. Box 130 Empire, NV 89405 Phone: 775-557-2341 FAX: 775-557-2212 Web: http://www.usg.com
Golden Valley Pit	A and K Earthmovers	S11, 12, T19N, R20E	aggregate	OP, ML	mining screening	3	P. O. Box 1059 1200 Auction Rd. Fallon, NV 89407 Phone: 775-423-6085 FAX: 775-423-8410 Web: http://www.akearthmovers.com
Hidden Canyon	Granite Construction Co.	S16, T20N, R20E	aggregate	OP, ML	mining crushing screening washing	6/6	P. O. Box 2087 1900 Glendale Ave. Sparks, NV 89432 Phone: 775-355-3434 FAX: 775-329-2803 Web: http://www.graniteconstruction.com
Lockwood Quarry	Granite Construction Co.	S17, T19N, R21E	aggregate	OP, ML	mining crushing screening washing	19	P. O. Box 2087 1900 Glendale Ave. Sparks, NV 89432 Phone: 775-355-3434 FAX: 775-329-2803 Web: http://www.graniteconstruction.com
Rilite Aggregate	Rilite Aggregate Co.	S23, T18N, R20E	sand rock	OP, ML	mining crushing	11	3025 Mill St. Reno, NV 89502 Phone: 775-329-8842 FAX: 775-329-3593
Spanish Springs Quarry	Martin Marietta Materials, Inc.	S15, 22, T21N, R20E	aggregate	OP, ML	mining crushing screening	27	11059 Pyramid Lake Rd. Sparks, NV 89436 Phone: 775-425-4455 FAX: 775-425-5131 Web: http://www.martinmarietta.com
Tracy Pit	Western Nevada Materials	S27, 20N, 22E	sand gravel	OP	mining crushing	0/8	50 Freepoint Blvd., No. 11 Sparks, NV 89431 Phone: 775-359-9988
Wade Sand Pit	Granite Construction Co.	S3, T20N, R24E	sand	OP, ML	mining screening	6	P. O. Box 2087 1900 Glendale Ave. Sparks, NV 89432 Phone: 775-355-3434 FAX: 775-329-2803 Web: http://www.graniteconstruction.com
WHITE PINE COUNTY							
Bald Mountain Mine	Barrick Gold Corp.	S14, 15, 19, 20, T24N, R57E	gold	OP, HL, ML	mining heap leach milling	196	P. O. Box 2706 Elko, NV 89803 Phone: 775-237-7100 FAX: 775-237-7101 Web: http://www.barrick.com
Mount Moriah Quarry	Mount Moriah Stone Quarries, LLC	S22, 23, 26, 27, 33-36, T16N, R70E	building stone decorative stone	OP	mining	61	P. O. Box 70 No. 10 Hatch Rock Rd. Baker, NV 89311 Phone: 435-855-2232 FAX: 435-855-2332
Robinson Mine	Robinson Nevada Mining Co.	S6, 8, 17, 18, T16N, R62E	copper gold silver molybdenum	OP, ML	mining milling	508	P. O. Box 382 Ruth, NV 89319 Phone: 775-289-7000 FAX: 775-289-7104 Web: http://www.quadramining.com

For additional information on Nevada's mineral resources and mineral industries see the NBMG publications:

Statewide Commodity Publications

Antimony (B61)	Oil and gas (B104, OF01-7, OF04-1, M162)
Barite (B98)	Radioactive minerals (B81, OF06-19)
Fluorspar (B93)	Talco minerals (B84)
Gypsum (B103)	Thermal waters (B91, M141, M151)
Iron (B53)	Tungsten (B105, M87)
Mercury (B41)	Zeolites (B79)
Montmorillonite, bentonite, and fuller's earth (B76)	

County Mineral Resource Bulletins

Carson City (B75)	Eureka (B64)	Nye (B77, B99B)
Churchill (B83)	Humboldt (B59)	Pershing (B89)
Clark (B62)	Lander (B88)	Storey (B70)
Douglas (B75)	Lincoln (B73)	Washoe (B70)
Elko (B106)	Lyon (B75)	White Pine (B85)
Esmeralda (B78)	Mineral (B58)	

Other Publications

Index to geothermal well files housed at NBMG (L-5)
Gold and silver resources in Nevada (M149)
Geothermal resources and potential (M141, M151)
Industrial mineral deposits (M142)
Nevada oil and gas well database (OF04-1, M162)
Major mines of Nevada 2007 (P-19)
Outline of Nevada mining history (SP15)
Mining districts of Nevada (R47)

NBMG maintains an open-file office with the following information available to the public:

NBMG, USGS, USBM, and DOE open-file reports on Nevada geology and mineral resources
petroleum and geothermal exploration and production
mining district records and maps (online only except for copyrighted items)
mineral resources and reserves
mineral resource assessments
core and cuttings library
mining claim data
wilderness study area reports
general geologic studies
indexes and ordering information for maps, air photos, and remote sensing imagery



Nevada Bureau of Mines and Geology
Mackay School of Earth Sciences and Engineering
College of Science
University of Nevada, Reno

The Nevada Bureau of Mines and Geology (NBMG) is a research and public service unit of the University of Nevada and is the state geological survey. NBMG is part of the Mackay School of Earth Sciences and Engineering at the University of Nevada, Reno. NBMG scientists conduct research and publish reports on mineral resources, engineering geology, environmental geology, hydrogeology, and geologic mapping. Individuals interested in Nevada geology are encouraged to visit, call, or write NBMG or visit our homepage at www.nbmng.unr.edu.

When visiting NBMG by car, please stop at the information booth just inside the Center Street entrance on the south end of the Reno campus of the University of Nevada. Ask for the Mackay School of Earth Sciences and Engineering map and directions to parking areas and the NBMG offices in the west wing of the Scrugham Engineering-Mines Building.

Information Office (room 311)

Publication Sales Office (room 310)

Store hours: 8:00 a.m. to 3:00 p.m., Monday through Friday

NBMG publications and maps, U.S. Geological Survey maps, and related publications can be purchased at the Publication Sales Office or ordered over the Internet at www.nbmng.unr.edu/sales.htm.

Orders for publications or requests for information may also be made by telephone, fax, e-mail, or U.S. Mail.

Orders: (775) 682-8766

Information: (775) 682-8767

Phone hours: 8:00 a.m. to 4:00 p.m., Monday through Friday

Fax: (775) 784-1709

E-mail: (orders) nbmgsales@unr.edu

(information) nbmginfo@unr.edu

U.S. Mail: Nevada Bureau of Mines and Geology
Mail Stop 178
University of Nevada
Reno, NV 89557-0178

The University of Nevada, Reno is an Equal Opportunity/Affirmative Action employer and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, and in accordance with university policy, sexual orientation, in any program or activity it operates. The University of Nevada, Reno employs only United States citizens and aliens lawfully authorized to work in the United States.